The 18th Congress of International Association of Rural Health and Medicine (IARM) had been held at Kala Academy in Goa, India on December 10 - 12, 2012 and been finished with big success. The president of the Congress was Dr. Ashok Patil, the President of IARM. The main theme was “Challenges for Rural Medicine in the Global Village”. About four hundred people gathered from 25 countries in the world. 24 delegates from Japan participated in this congress and presented their thirteen studies. Dr. APJ Abdul Kalam, the former President of India, participated in the inauguration ceremony, and the newspapers reported the congress next day (see Figure 1 below). In the inauguration, Dr. Shintani greeted on behalf of the Japanese association of Rural Medicine (JARM) and showed the films of Great East Japan Earthquake on the next day. IARM Executive Board Meeting and General Assembly were held on Dec.10, and Dec.11, respectively. Details of the Congress are provided in http://ruralhealthgoa2012.org/ and in http://www.iaamrh.org/.

Figure 1: The newspaper reported the speech of Dr. APJ Abdul Kalam, the former President of India, in the inauguration ceremony on December 10, 2012.
Figure 2: 24 delegates from Japan participated in this Congress.

Figure 3: Dr. Patil, President of the Congress, welcomed Dr. APJ Abdul Kalam, the former President of India.
The 13 Presentations by Japanese Delegates in The 18th International Conference of Rural Health & Medicine

3. Shunji Okae. The role of the CT abdomen in enabling junior residents to accurately diagnose patients with an acute abdomen.
7. Kiyoshi Ohara. Japanese reaction to radioactive pollution occurred by the nuclear power plant accident associated with the Japan huge earthquake.
8. Shin Tsuruoka. Response and agenda of our hospital to great east Japan earthquake.
10. Kanae Hamano. Related factors concerns the quality of life of the elderly population on a remote island.
13. Shuzo Shintani. Efficacy and ethics of artificial nutrition supply in patients with neurologic impairments in home care at the rural setting in Japan.

Figure 4: From left to right, Dr. Shintani (Secretary General of IARM, Japan), Dr. Patil (President of IARM), Dr. Kalam (The former President of India), Dr. Kim (Korea), and Prof. Hannich (Vice President of IARM, Germany) in the inauguration of the Congress.
Figure 5: Lamp Ceremony in the inauguration, from left to right, Dr. Shintani (Secretary General of IARM, Japan), Dr. Kalam (The former President of India), Dr. Patil (President of IARM), and Dr. Kim (Korea).

Figure 6: About four hundred people gathered from 25 countries in the world.
Figure 7: Dr. Patil, President of IARM, gave a lecture in the session of “Reforms in Medical Education to Improve Rural Health Care”.

Figure 8: Presentations in the session of “Women’s Health & Empowerment”
Figure 9: Prof. Hannich, Vice President of IARM, gave a lecture in the Congress.

Figure 10: Executive Board Meeting was held on Dec. 10, 2012. From left to right, Dr. Hideomi Fujiwara (President of JARM, Japan), Dr. Shintani (Secretary General of IARM, Japan), Prof. Hannich (Vice President of IARM, Germany), Dr. Niu (ILO, Switzerland), Dr. Patil (President of IARM), and Dr. Kim (Korea).
Figure 11: Traditional dancing by the natives in the welcome night party at the Congress

Figure 12: A stuffed bear was dancing at the top of the march.
The Speech of Dr. Shintani in the inauguration on behalf of the Japanese Association of Rural Medicine

I am Shuzo Shintani from Japan. I am a Board Member of the Japanese Association of Rural Medicine (JARM). First of all, on behalf of the Association of my country, I would like to extend my sincere congratulations for holding the 18th Congress of IARM in Goa.

We have now 24 delegates from Japan in this Congress. Japanese association of Rural Medicine (JARM) was established 60 years ago by Dr. Wakatsuki and his colleagues, and now our association consists of 4,510 physicians and researchers involved in rural health and medicine.

I am afraid that recently the substantial works for the field of rural health and medicine seems to be carried out in a few countries. I hope that IARM will encourage and support such works in each country, and build a worldwide network for colleagues involved in works of rural health and medicine.

Now, on behalf of the Japanese People, I thank you deeply for your warm thoughts and expressions of sympathy for our tragedy. As you know, we have experienced tremendous earthquake followed by enormous tsunamis on March 11, last year. The number of casualties by now is 15,870, and 2,814 people are still missing.

Furthermore, we have been experiencing another disaster caused by the earthquake and tsunamis, which is not visible but more terrible. The radiation being released from the affected nuclear power plants located in Fukushima Prefecture has now been the center of attention in Japan. Our Japanese delegates will present these matters at this Congress.

IARM is an independent association for agricultural and rural health professionals. I am now a Secretary General of IARM. I would like to do my best in contributing to the development of rural medicine and this association.

GOA DECLARATION

The participants of the 18th International Conference of Rural Health & Medicine held at Panaji, Goa, India from 10th to 12th Dec. 2012, collectively affirm & adopt the following declaration:

1. The Challenges for Health have crossed man made geographical boundaries and ‘Your health, My health, Our health’ has become a reality.

2. That we are all governed by the same principles of economics and thus there is a dire need to reaffirm our faith in Human Rights and Health for sustainable Development.
3. That Sustainable Development refers to human development in which resources used meet human needs while preserving the environment so that needs can be met not only of the present generation, but also for the generations to come.

EVERY HUMAN BEING IS CREATED EQUAL AND HAS A RIGHT TO DECENT LIVING, WHICH INCLUDES ACCESS TO HEALTH CARE SERVICES, CLEAN & POTABLE DRINKING WATER, SANITATION, EDUCATION AND NUTRITION.

4. We reaffirm the relation between health, human rights, and economic growth. Healthy workers are, for example, good for both governments and business. Our commitment to sustainable development needs to ensure that we are creating more healthy societies and improving the living conditions for people.

5. Health is more than a medical issue and there is a need for a new global vision for health that will build on the MDGs and connect to future development goals. Health would entail a ‘continuum of care’ across sectors, hence global & national health policies should encourage multi-sectoral approach. The vision, based on countries’ needs, should be translated into clear goals, expected results, and guiding principles for its implementation.

6. We commit towards evolving Universal Access to Essential Health Care & Medicines, so that the disparities in access to health care and its affordability, particularly those faced by disadvantaged and underserved segments of population, are corrected.

7. Women’s and children’s health is a human rights issue and closely interlinked with the empowerment of women and girls resulting in gender equality.

8. Health must be brought out of isolation. The impact of issues such as climate change and the direct effects it has on people’s health NEEDS discussion. Health is an important indicator for how well we are managing the climate, water resources, food and energy production. Global warming is one of the most serious risks for future generations in the world. We must continue to assess the health risks of global warming.

9. Health education must be introduced at the primary school level to raise awareness and knowledge about health issues.

   The latest DALYs (Disability Adjusted Life Years) reports have confirmed that the overall patterns and trends in disease burden of the Developed and Developing economies are beginning to converge with.

10. A Growing Geriatric population leading to increase in Dementia and Alzheimer’s and subsequent funding required from governments to increase social security, aged pensions and healthcare for the aged. An increase Trauma and Accidents causing a huge burden in terms of disability and morbidity.
11. An increase in the global burden of cancer, psychiatric problems, depression and cardio-vascular diseases and metabolic syndrome risk factors.

12. Evidence of occupational hazards through chemicals and machinery used in unorganized sector particularly in agriculture, fishery, horticulture etc. is on rise.

13. Infant Mortality Rate & Maternal Mortality Rates that need to be reviewed in most developing countries – India alone accounts for 19% of world’s total maternal deaths and is not on target to address the MDGs 4 and 54. EMPOWERMENT OF WOMEN IS THUS CRITICAL THROUGH INVOLVEMENT OF MEN - sensitising men, addressing patriarchal barriers, and issues of Intimate Partner Violence (IPV), STIs & HIV.

14. Rapid urbanisation has led to fringe dwellings and subsequent increase in poor health indicators by migrant and transient populations – the needs of urban dwellers living in shanty towns needs to be addressed by urban planners.

15. A pressing need to empower and engage communities so that community needs can be addressed and to bring people back at the centre of the debate. Policies need to be PEOPLE CENTRED and not issue centred. The issue of needs to be addressed: including tribal health and international indigenous health.

16. Governments allocating and providing funding for physiotherapy and dental services.

17. Medical & Health Research that needs to be supported so that the current situation of 90% of total funds being spent on 10% of diseases is reversed.

18. Manpower, skill development and capacity building at all levels of medical and allied health professions is becoming increasingly critical and needs to be addressed. The context of allied health education is important and needs to focus on patient centred care. Allied health professionals need meaningful roles in practice.

19. Investing in people’s health in general and financing health care programs in particular, especially to rural, urban poor, migrants and other disadvantaged & underserved segments of the society should be the highest priority of the governments. Financing of Health care especially rural health care needs to be prioritized by the government.

20. Creating quality and sustainability of health systems through establishing reforms in medical education by providing a rural focus and community orientation.

21. The Medical Education Curriculum needs to be integrated and focus on Inter-professional education and with an emphasis on health equity, community and preventative health.
22. The aim of Medical Education should be to facilitate application of Medical Technology for providing best care to the poor at the most affordable cost.

23. Public-private partnerships need to be explored and encouraged especially in health education and delivery. State resources and public money expenditure needs to be monitored and audited. Strong regulations need to be put in place for the accountability and evaluation of Health systems. Community based monitoring is a critical means of demanding accountability and strengthening public health systems.

24. There needs to be regulation of the growing use of complementary and alternative medicine (CAM) and increasing recognition of the growing global acceptance of CAM.

The Conference Declaration resolves to undertake the following actions:

1. Increase social accountability of all organizations (public, private and not for profit) involved in health care to place social justice and health equity at the core of change efforts;

2. Involve and Empower Communities to participate in improving their own health;

3. Focus on the social determinants of health and the life cycle approach to improving health and reducing health inequities;

4. Introduce Health Education Curriculum at the primary school level and adopt the Health Promoting Schools approach.

5. Advocate for political commitment and prioritise rural health in the political agenda of governments through incorporating and prioritising rural health in the community development plans;

6. Improve resource allocation and expansion of the health care system to cover rural populations through an enhanced and integrated primary health care approach based on cultural safety;

7. Support training and education of rural health professionals to meet the need of rural people in particular women, children, the aged and migrant agricultural workers.

8. Invest in health research that focuses on rural and community health that involves communities, is participatory and has a translational impact.
Minutes

Executive Board Meeting

The 18th International Congress of International Association of Rural Health and Medicine

At 18:00 on 10 December, 2012
Kala Academy, Goa, India

Present:
Dr. Ashok Patil (President), Dr. Hideomi Fujiwara (Treasurer),
Dr. Shuzo Shintani (Secretary General),
Prof. Hans-Joachim Hannich (Vice President), Dr. Shusuke Natsukawa (Japan),
Prof. Kanae Hamano (Japan), Prof. Peter Lundqvist (Sweden),
Prof. Istavan Szilard (Hungary), Dr. Shengli Niu (ILO), Dr. Myun Ho Kim (Korea),
Mr. Kazumi Ichikawa (Japan)

1. Self-introduction was received from attendees.
2. A moment of silence was observed for Dr. Isao Kawamura, Dr. Masato Hayashi and Dr. Rajanikant Arole.
3. The minutes of the 17th congress at Cartagena, Colombia was confirmed.
4. Report of activities by the Secretariat was presented: overhauling a membership list, introducing a new method of membership payment.

Items decided are as follows:
1. Membership fees
   Attendees approved the following payment method submitted by the Secretariat:
   1) Annual Credit Card Payment
   2) Bank transfer payment every 3 years in a lump sum for 3 years
   3) Cash payment at Congresses

Then the discussion was turned to focus on the financing and collecting membership fees.
Opinions and proposals were raised as follows:
- Differentiate the registration fee for the International Congress between members and non-members.
- Increase of the membership fees
- Discount on registration fee for the members in good standing
- Credit card payment every 3 years in a lump sum for 3 years

Dr. Ashok Patil mentioned that the life members who had registered under the former statutes in any country shall be considered as a Full member of IARM, and so it was confirmed.

Discussion about methods of fund raising and collecting fees were exchanged freely in relation to the issue of increasing the number of the members. It was agreed that the approaches should also be made to bodies not only to individuals in order to obtain a certain number of continuing membership. The members in good standing should receive some benefit at the International Congress: ex. discount on the registration fee.

5. The next presidency
The Secretary General, Dr. Shuzo Shintani proposed that Dr. Ashok Patil should maintain the Presidency. This proposal was unanimously approved.

6. The next Congress
According to the confirmed minutes of the Executive Meeting held during the 18th Congress at Cartagena, Colombia in 2009, an offer by Prof. Colosio for hosting the 19th Congress in Milan has to be considered as the first priority. Otherwise, Prof. Hannich will be exploring the possibility of holding the next congress in Germany, combined with other bodies by the sponsorship of Krupp foundation.
All attendees agreed with the above.

7. The Statutes
It was expressly pointed out by Dr. Ashok Patil that the procedure of election for the presidency as well as board members must be included in the statutes. The finance issues of organizing Congress could also be mentioned in the statutes. All agreed the above, and subsequently confirmed that the association certainly needed guiding principles in order to ensure the accountability, the transparency and the democracy. It was also suggested that any record at the meetings and assemblies should always be kept and open to anybody.
8. Working group
For better governance of the association, forming a working group was proposed by Prof. Hannich. The proposal was approved.
The members of the working group were recommended tentatively as follows;
  Dr. Ashok Patil,
  Dr. Shuzo Shintani
  Prof. Hans Joachim Hannich
  Prof. Peter Lundquist
  Prof. Istvan Szilard
Prof. Hannich will be in charge of drawing a draft to establish the group.

9. Board of Executive Committee
It was agreed that current members continue to organize the Board of committee for the next three years.
All attendees recognize that the Board Meeting should be held more often rather than once in 3 years.
Minutes

General Assembly

The 18th International Congress of International Association of Rural Health and Medicine

At 17:30 on December 11, 2012
Kala Academy, Goa, India

The President of IARM, Dr. Ashok Patil chaired the Assembly.

1. The next presidency
The Secretary General, Dr. Shuzo Shintani announced that Dr. Ashok Patil had been nominated and approved for the next president by the Executive Committee. It was presented at the General Assembly and approved unanimously with applause.

2. The 19th Congress
It was confirmed that the 19th International Congress of IARM will be held either in Italy or Germany in 2015. According to the confirmed official minutes of the Executive Meeting held during the 18th Congress at Cartagena, Colombia in 2009, an offer by Prof. Colosio for hosting the 19th Congress in Milan has to be considered as the first priority. Otherwise, Prof. Hannich will be exploring the possibility of holding the next congress in Germany, combined with other bodies by the sponsorship of Krupp foundation.

3. Payment Method of Membership fees
Renewing the payment method of membership fees of IARM had been proposed and approved by the Executive Committee as follows;
1) Annual Credit Card Payment
2) Bank transfer payment every 3 years in a lump sum for 3 years
3) Cash payment at International Congresses
It was presented at the General Assembly and was approved unanimously.
4. The Statutes
Dr. Ashok Patil stressed that the statutes of IARM should be reviewed in order to ensure the accountability, the transparency and the democracy for the better governance. It was agreed unanimously.

5. Working group
Establishing a working group had been suggested and agreed by the Executive Committee in order to review the statutes and to create the guiding principles of IARM.
It was presented to the General Assembly and approved unanimously.

The working group will tentatively start off with following members. Prof. Hannich kindly accepted to take the lead.

-Dr. Ashok Patil, the President
-Dr. Shuzo Shintani, the Secretary General
-Prof. Hans-Joachim Hannich, Vice President
-Prof. Peter Lundqvist,
-Prof. Istavan Szilard

6. Board of Executive Committee
The Executive Committee had approved a proposal that the current Executive Members continue to organize the Board of Executive Committee for the next three years.
The General Assembly gave the proposal its final approval.
It was suggested that Executive Board Meeting should be held more often rather than once in 3 years. It was approved by the Executive Committee.
Dear friends and colleagues,

We have a sad duty to inform you that one of the important persons of our association, Dr. Isao Kawamura, currently Vice-President of International Association of Rural Health and Medicine (IARM) has passed away on May 10, 2012. He died at the age of 69 by the sudden onset of rupture of aortic aneurysm.

Dr. Kawamura graduated from the Faculty of Medicine, Chiba University School of Medicine, Japan in 1968. He worked in clinical practice in the Department of Surgery at Shimotsuga General Hospital in Tochigi prefecture, Japan. He was the Honorary Director of this hospital, and had been a Board Member of the Japanese Association of Rural Medicine (JARM). His expertise was bariatric & metabolic surgery and surgical treatment of obesity. He also was a representative of the International Federation for the Surgery of Obesity.

He dedicated his scientific work to the health of the rural population, and was one of the precursors who pointed out the health problems of rural people. With his work, he also was engaged in an international network of rural health experts. He had contributed very much to our association, IARM, in the position of Vice-President.

With his death, we all have lost a friend whom we will commemorate not only because of his outstanding engagement in the rural health issue but also because of his heartiness, open-mindedness and philanthropy. His death will be a commitment for us to carry on his work.

With best regards,

December 10, 2012

Dr. Hideomi Fujiwara  
President, Japanese Association of Rural Medicine (JARM), Treasurer of IARM

Dr. Shuzo Shintani  
Secretary General of IARM, Editor-in-Chief of Journal of Rural Medicine
Obituary

Dear friends and colleagues,

We have a sad duty to inform you that one of the important persons of our association, Dr. Masato Hayashi, currently a Board Member of International Association of Rural Health and Medicine (IARM) has passed away on November 30, 2010. He died of the age of 78 by colonic cancer.

Dr. Hayashi graduated from the Faculty of Medicine, Tohoku University School of Medicine, Japan in 1959. He worked in clinical practice in the Department of Internal Medicine at Hiraka General Hospital in Akita prefecture, Japan. He was also the Honorary Director of this hospital, and has been the president of the Japanese Association of Rural Medicine (JARM). His expertise was bariatric & cardiovascular medicine and the field of health and medical care.

He dedicated his scientific work to the health of the rural population, and was the precursor who pointed out the health problems of rural people. He had contributed very much to our association, IARM, in the position of Board Member.

With his death, we all have lost a friend whom we will commemorate not only because of his outstanding engagement in the rural health issue but also because of his heartiness, foreseeability and leadership. His death will be a commitment for us to carry on his work.

With best regards,

December 10, 2012

Dr. Hideomi Fujiwara
President, Japanese Association of Rural Medicine (JARM), Treasurer of IARM

Dr. Shuzo Shintani
Secretary General of IARM, Editor-in-Chief of Journal of Rural Medicine
Proceedings of 18th International Congress of Rural Health & Medicine

December 10 - 12, 2012

Organizers of the Congress
International Association of Rural Health and Medicine, Japan
Pravara Medical Trust's Pravara Institute of Medical Sciences - Deemed University, Loni, India
International Arbitration Centre, Goa, India

In collaboration with
Government of Goa, Goa
Goa University, Goa
Goa Medical College, Goa

Co-sponsors & Knowledge Partners
World Bank India, New Delhi
Medical Council of India, New Delhi
Indian Council of Medical Research, New Delhi
Action Aid India, New Delhi
Dr. Vikhe Patil Foundation's Pravara Centre for Management Research & Development, Pune
Appolo Pharmacy, Hyderabad
Draeger Medical India Pvt. Ltd., Mumbai
Torrent Pharmaceutical Ltd., Mumbai
Mupusa Urban Co-operative Bank of Gov, Ltd

President Dr. Ashok Vikhe Patil

WELCOME
Dear Colleagues,
It is a matter of immense pleasure and privilege to extend a hearty welcome to all of you for this very important and unique International Congress of Rural Health and Medicine being held on 10-12 December 2012 at Kala Academy (Cultural Centre), Panaji, Goa, India. As you are aware, the IARM organizes its International meet once in every three years. The main theme of the 18th International Congress is “Challenges for Health in the Global Village”.

We are glad to inform you that over 500 experts across the globe are taking part in the conference to deliberate keynote addresses, plenary, CME, thematic and poster sessions. The conference is expected to provide a unique opportunity to all of you who are from different backgrounds like policy markers, bureaucrats, academicians, researchers grass roots health & development workers, NGO representatives to learn from each other and work towards a common goal of improving the conditions of rural people and finding solutions on issues that affect the health & quality of life of vulnerable sections of the society.
It is very apt to organize this International Congress in Goa, India in view of Goa celebrating the culmination of its golden Jubilee year in 2012. With the eternal land of sun, sand and sea, Goa is an ultimate conference and holidaying destination. Goa is beautiful with not just beaches and sun but with innumerable attractions like heritage homes, churches, temples and forts.

We on behalf of the Organizing Committee of the conference express our gratitude to all the knowledge partners and Co-sponsors and National and International Advisory Committee Members, who are actively involved in supporting and organizing this conference. On behalf of the Organizing Committee, we assure you that every possible effort will be made to see that your visit to Goa is meaningful, productive and memorable.
**Shri Ramakant Khalap**  
Co-Chairman Organizing Committee  
Chairman, International Arbitration Centre, Goa

**Dr. Ashok Vikhe Patil**  
Chairman Organizing Committee  
President, International Association of Rural Health and Medicine, India

**Conference Objectives:**  
To address key challenges & issues through exchange information, skills & practices for improving health of people of rural and remote areas of the world.  
* To promote dialogue & partnerships among doers, policy makers & implementer, sponsorers to tackle various health problems in a unified and holistic way in the Global Village.  
* To highlight and foster opportunities for learning from experiences, rural health models that can be replicated.  
* To provide an opportunity to students & young medical, public & rural health specialists to exchange information on recent development in public health research.

**Conference Venue:** Kala Academy, Panaji, Goa, India  
**Dates:** 10th, 11th, 12th of December 2012  
**Official Language:** English

**Conference Theme:** "Challenges for health in the Global Village"

**Sub themes:**  
1. Access & Utilization of Health Care  
2. Rational Use of Drugs & Appropriate Technology in Health  
3. Women, Adolescent and Child Health  
4. Communicable, Vector borne & Zoonotic diseases  
5. Non Communicable diseases - Tobacco Control, Mental Health, Diabetes, Cancer, Food & Nutritional disorders, HIV/AIDS etc  
6. Disaster Medicine in Rural Areas  
7. Occupational Health - Accidents & Injuries in Agriculture, Forestry, Fishery and Mining  
8. Environmental Sustainability & Health  
9. Rural demographic challenges (aging, gender imbalance, migration etc)  
11. Research Priorities in medical, pharmaceutical sciences & rural health  
13. Global health – commercialization and ethics  
14. ICT, Biotechnology and Rural Health (tele-medicine, e-health, medical/bio informatics, medical biotechnology, bio-medical engineering)  
15. AYUSH & Alternative Systems of Medicine

**Scientific Sessions in the Conference:**  
**Keynote Addresses on**  
1. Challenges of Rural Health in Global Village  
2. Rural Health Options and Approaches  
3. Appropriate Technology in Health  
4. Financing Rural Health Care

**Plenary Session / CME**  
5. Strategies for Rural Health in a Global Village  
6. Reforms in Medical Education for Improving Rural Health  
7. Financing Rural & Child Health Care

**Thematic Scientific Sessions - 15 Oral & 15 Poster Sessions**
Plenary Session 1
“Strategies for Rural Health in a Global Village”
12.00 pm – 01.00 pm on 10.12.2012  Venue: DMKM
Chairperson: Dr. Shengli Nio, ILO, Geneva
Co-Chairperson: Dr. S.R. Shetye, VC, Goa Univ.
1. Strategies for Injury Prevention in Sweden - Dr. Peter Lundquist, SLU, Sweden
2. Rural Health Research – Dr. T.P. Ahluwalia, ICMR, Government of India
3. Multi-sectoral Approach for Sustainable Health & Development- Dr. Ashok Patil, IARM, India
4. Inequalities in rural health – Dr. Andzej Wojtyla, IRM, Poland

Parallel Scientific Session 1
Access & Utilization of Health Care
2.00 pm – 3.30 pm on 10.12.2012
Oral Presentations - Venue: DMKM
Chairperson: Dr. Peter Lundquist, Sweden Co-Chairperson: Dr V.N Jindal, India
1. Present Status of Cases with Breast Cancer at Saku Central Hospital and Assessment of Treatment Quality - Hiroyuki Ishige, Japan
2. Restructuring Indian Health Care Delivery at the Grassroots - Mrs. Maxie Andrade
3. To identify the gaps in the current physiotherapy curriculum towards providing primary health care in India. Prof. Lata D.Parmar, India
4. Collaboration between hepatologists and primary care physicians in treating patients with chronic hepatitis C in Japan – Dr. Tazawa Jyunichi, Japan
5. Contraceptive use and unmet need in women of rural Varanasi - Dr. Shakraja
6. Issues of Health Facilities in Guabe Kuje Area council of the federal capital territory, Abuja Nigeria - Mr. Michel Adedotun Oke, Nigeria
7. What makes Primary Health Center Get Utilized? - Dr. Devika Pandurang Jeeragyal, India
8. Utilization of Government Health Services and Schemes by BPL rural families- Mr. Rohit A Bhat, India

Poster Presentation - Venue: Art Gallery
Chairperson: Dr. Vijay Kumar Singh, India
1. A Study of Knowledge & Utilization Pattern of Janani Suraksha Yojana (JSY) Beneficiaries in Akola Dist. of Maharashtra State - Vilas Malkar
2. A Cross Sectional Study to assess the Correlates Influencing Absenteeism of Beneficiaries in Anganwadi's Affiliated to a Sub-center in Tribal Dist - Dr. Tarun Shrikrishna Khandednath
3. Referral Services of Primary Health Center: An Epidemiological Review - Dr. Pranali Khobragade, India
4. Revisiting Maternal Health Care Services Utilization among Rural Married Women in EAG states amidst Conditional Cash Transfer Scheme- Evidence for DLHS-3 - Mayank Prakash, India
5. Socio-Economic Inequality in Utilization of Delivery care in rural India – Trends analysis during 1992-2006- Divya Kumari, India
6. Antenatal care Service Utilization by Pregnant Women in Rural areas of Ujjain Dist. in Madya Pradesh- Dr. Anand Rajput, India
7. Barriers and Opportunities in Utilization of Reproductive health services in most populations state (Uttar Pradesh) of India – Evidences from DLHS- 3- Prahlad Kumar, India
8. A study on health seeking behavior of parents towards their children in rural field practice area of medical college in Andhra Pradesh - Dr. D Chandra Shekhar, India
9. An exploration into childhood diarrhoea, its knowledge, household management and treatment seeking behaviour in rural India; Insight from DLHS-3- Mayank Prakash, India

Parallel Scientific Session 2
Primary Health Care & Health Promotion
2.00 pm - 3.30 pm on 10.12.12
Oral Presentation Venue: Black Box
Chairperson: Dr. David Moores, Canada Co-Chairperson: Dr. B.M. Vashisht, India
1. Enhance cultural awareness of students and experienced nurses through exposure to health care systems in a developing country – Prof Mark Jones, Australia
2. Intervention to facilitate integration of traditional health practices in South African Medical Care: A 3 year comparative pre & post study – Dr Marykutty Mammen, South Africa
3. Understanding community perception of health & social needs in five rural villages in Gujarat state, India: Results, experiences & recommendations from rapid participatory appraisal – Dr. Clancy Read, Dr. Jaya Earnest, Australia
4. Disparity in professional & personal attitudes of Anganwadi workers towards persons with disabilities in rural communities- Dr Anupama Khanna, India
5. Challenges for health in the global village; A case study of the rural health care delivery system in Northern India - Dr Shikha Dixit, India
6. Perception regarding compulsion of rural service for the medicos- Mr. Shyamsundar S, India
7. The effect of back pack on cervical & shoulder posture in male students of Loni - Deepali Hande, India
8. Self medication use in Pune, Maharashtra, India- Dr Yogendra Kache, India
9. Comparative Evaluation of Effectiveness of Health Hazard Warning Signs on Tobacco Products Among Rural Population: A Prospective Survey – Dr. Kiran Jadhav, India

Poster Presentation - Venue: Art Gallery
Chairperson: Dr. Dayanad Shetty, Pune, India
1. Reasons for incomplete immunization: a cross sectional study at urban health centre of Government medical college Aurangabad – Abhjeet Ingale, Dixit JV, Kiran shinde, Mahavir Nakel,Deven Deshpande, India
2. HPV Vaccine – Knowledge, awareness and felt need in female students of R.D.GMC. Ujjain M.P.- Patidar shivnarayan, India
3. Basic Package of oral care-feasibility in rural India- Dr.Ramya Shenoy, India
4. Seroprevalence of transfusion transmitted infections among healthy blood donors at blood bank attached toward tertiary care hospital- Umesh S Joge, India
5. Awareness and practices of Biomedical waste management among hospital attached to a teaching institute- Mohan M Raut, India
6. Qualitative study of village health, nutrition and sanitation committee regarding their roles and responsibilities in selected village of five subcenters of PH, Anji in Wardha - Dr. Pramod Kumar Sah, India
7. A survey on awareness among community health workers and anganwadi workers about physiotherapy services in Ahmed nagar district- Dr.Mahendra. I.Shende, India
8. Effectiveness of semirigid shoe wedge on patello femoral pain syndrome in workers of PIMS.Loni- Kasturi Pawade, India
9. Quality of care and client satisfaction with neonatal care in healthcare facilities in Ballabgarh block, Faridabad District, Haryana- Pradip Kharya, India

Parallel Scientific Session 3
Training of Community Health Work Force
2.00 pm- 3.30 pm on 10.12.12
Oral Presentation - Venue: Rehearsal Hall
Chairperson: Prof. Kristina Kindblom, Sweden
Co-Chairperson: Dr. Kurus Coyajee, India
1. Cross practice - challenges & way ahead – Dr. Dixit J V, India
2. The Body as an Educational Instrument - a resource in health care- Dr. Kristina Kindblom, Sweden
3. Interventional study to assess effectiveness of modular training on knowledge & perceptions about STI & HIV/ AIDS among ASHA workers of a PHC – Dr. Betsy Anthony Cherusraikkaran, India
4. Use of audio visual training in local language during community gatherings to raise awareness about role of community based occupational therapy & train handling common medical emergencies in rural settings- Dr. Neeraj Mishra, India
5. Pre diagnosis health screening program by paragynaec health workers: An intervention to reduce burden of diseases on rural women in Purandar Block, Pune district, Maharashtra – Dr. Kajal Jain, India
6. Assessment of health care services at community health centres in southern district of Rajasthan and their conformance to Indian Public Health Standards 2007- Dr. C P Sharma, India
7. Attitude and intimation towards rural health care carriers: A study among medical students in the national capital region, India- Dr. Sharma R, India
8. Antibiotic use among health science students in an Indian University: A cross sectional Study- Dr. Avinash Kumar, India

Poster Presentation - Venue: Art Gallery
Chairperson: Prof. Ursula Viktoria Wisiak, Austria
1. Evaluation of education programme for cancer screening in Korean rural area for 4 years - Heui Sug Jo, Bo Young Lee, South Korea
2. Changes in the knowledge and perception regarding reproductive health amongst adolescent boys of an Ashramashala following training intervention - Dr. Neeraj Dhingra, India
3. The role of the CT abdomen in enabling junior residents to accurately diagnose patients with an acute abdomen - Shunji Okae, Japan
4. Assessment of training needs of school children to enable them to respond to emergency health situation in the rural field practice areas of tertiary care hospital - Dr. Aparna Sundaresan Iyer, India

Parallel Scientific Session 4
Communicable and Vector born Diseases
4.00 pm - 5.30 pm on 10.12.12
Oral Presentation - Venue: DMKM
Chairperson: Dr. Maria Theresa Espinosa, Colombia Co-chairperson: Dr. Soon Young Kim, Korea
1. Occurrence of Zoonotic diseases in Rural Community - Dr. Manasi & Dr A.K. Upadhya, India
2. Knowledge and attitude towards Tuberculosis among Rural Population - Dr. Shobha S.K, India
3. Effectiveness of video assisted teaching programme (VATP) on knowledge regarding care of tuberculosis among care givers of T.B patient - Ms. Sunu Thomas, India
4. Cholera Outbreak in Ukkali Village Tq – Basavana Baewadi, Dist- Bijapur, Karnataka - K.A. Masali, India
5. Assess the Awareness and Attitude on HIV/AIDS among the rural Population - Ms. Heera Jayashela, India
6. Comparative analysis of H1N1 (Swine Flu)awareness among adolescents of urban and rural population - Manjrekar SS, India
7. Knowledge, attitude, behaviour and practice on locally endemic mosquito borne diseases in rural areas of Rajkot District, Gujarat – Dr. Mayur Vala, Gujarat, India
8. Exploring household waste as larval habitat of Dengue vectors in rural west Bengal, India: Implication for environmental health management - Mr. Soumyajit Banerjee, India

Poster Presentation - Venue: Art Gallery
Chairperson: Dr (Mrs) Hemangini K. Shah, Goa, India
1. Rural – Urban dichotomy in prevalence of Tuberculosis in India: A analysis of socio economic perspective - Shubhranshu Kumar Upadhya, India
2. Bio efficacy of neonicotinoid insecticide: imidacloprid against mosquito larvae, culex-cuinquefasciatus-(say)- Sweta Bhan, India
3. Larvicidal potentiality of pseudocalymma alliaceum against malaria vector, anopheles stephensi- Shrankhla, India
4. Density effect of intraguild insect predators on mosquito regulations- Shreya Brahma, India
5. Knowledge of tuberculosis among high school students in urban area in Bangalore- Padma Priya T, India
6. Awareness of HIV/AIDS among adolescent males of tribal area of western Maharastra, India - Dr. Pranil Kamble, India
7. Evaluation of mass drug administration activity for filariasis control in rural areas in Nagpur district (Maharashtra)- Dr. Amandeep Kaur Ratta, India

Parallel Scientific Session 5
Non Communicable Diseases – I
4.00 pm – 5.30 pm on 10.12.12
Oral Presentation Venue: Black Box
Chairperson: Dr. Shuzo Shintani, Japan Co-chairperson: Dr. Kevin Fernandez, Pune
Lead Speaker: Dr. Umesh Kapil, AIIMS, India - Prevalence of overweight and obesity among school children belonging to lower income group (LIG) and middle income group (MIG) from 5-18 year in national capital territory (NCT) of Delhi
1. Relationship between locus of control and oral health among 15 years old rural school children - Dr. Aishwarya Singh & Dr. Sudhansu Saxena, India
2. Empowering the primary health care professionals for oral cancer screening – Dr. Khushboo Thakkar, India
3. Extending services for people with dementia in rural areas - Evidence from a model in Goa, India - Dr. Amit Dias, India
4. Effectiveness of psycho education on psychological distress and coping strategies of parents of children with cerebral palsy - Ms. Aswathy KJ, India
5. Role strain and caring behavior among caregivers of cervical cancer patients - Ms. Gisha George, India
6. Assess the awareness and attitude on cancer among rural community - Mr. T. Shivabalan, India
7. Role of biochemical parameters in assessment of demographic data, ophthalmic measurements in primary open angle glaucoma patient in rural population - Dr. Agte AB Dr. Dharwadkar Dr. Gaikawad SB, India

**Poster Presentation - Venue: Art Gallery**

**Chairperson:** Dr. J.V. Dixit, Aurangabad, India

1. Prevalence of Arthritis and related factors among Korean Adults – Dr. Hae-Sung Nam & Soon Young Kim, South Korea
2. Analysis of patient background, treatment, and prognosis in women with ovarian cancer - Ms. Motohiro Shimizu, Japan
3. Clinical study of cerebro vascular arterial dissection in Saku Central Hospital- Mr. Hitoshi Watanabe, Japan
4. Profile of Breast Cancer Patients Attending Cancer Hospital in North Karnataka: A Cross Sectional Study- Dr.Rani Virupaxi, Ms.Sheenaanma var, India
5. Measurement of Illness Perception among Rural Hypertensive Patients in Pune district- Dr.Aarti Nagarkar, Ms.Puja Gund, Mr.Swapnil Gadhve, India
6. Knowledge and attitudes on anti tobacco measures imposed under 'the cigarettes and other tobacco product act 2003'among rural men in northern India- Dr. Nabeel Ahmad, India
7. Assessment of Knowledge, Attitude and Practice regarding Tobacco use among pre-university students of rural area - A cross sectional study - Ms.Kavi Avinash, Mr.Walvekar P R, Mr.Mallapur M D, Mr.Naik V A, India
8. Clinico-social profile of patients with end stage renal disease in a tertiary care center of rural Kerala, India- Mr.Sam Paul C, India
9. Incidence of HIV infection among rural population attending ICTC Centre of Rural Medical College, Loni – Ms. Pradnya Jadav, India
10. Co-infection of HIV and intestinal parasites in rural population of Loni – Ms. Namita A Raytekar, Loni, India

**Parallel Scientific Session 6**

**Non Communicable Diseases – II**

4.00 pm – 5.30 pm on 10.12.12

**Oral Presentation Venue: Rehearsal Hall**

**Chairperson:** Dr. Carina Ursing, Sweden  
**Co-chairperson:** Dr. Motghare, Goa

1. Screening for Diabetes mellitus – a non communicable diseases (NCD), in a rural area of India – Dr. Carina Ursing, Sweden
2. High Resolution Computed Tomography in Chronic Obstructive Pulmonary Disease with Phenotyping- Dr. Dayanand Shetty, India
3. Assessment of Knowledge, Attitude and Practice of Electronic Cigarette Users in Pune city and Chemical Evaluation of e-cigarette: An Observational Study- Dr. Sushil Anil Phansopkar, India
4. Substance use among High School Students of Rural Bhopal, MP, India- Dr. Sudhanshu Saxena, India
5. A rural population based epidemiological study on prevalence of oral cancer and associated risk factors in Hassan district, Karnataka- Dr. Sunder M, India
6. Expression of P53 gene in induced lung carcinoma treated with combination therapy- B. Revathi Mani, India
7. Tobacco use among Adults in a Rural Area of Costal Karnataka- Mr. Muralidhhar M K, India
8. Study of prevalence of diabetes and its associated risk factors on tribal area - Dr. Sagar P Patil, India
9. Oral health promotion through schools in India need or want? – Dr. Saurabth P. Kakade, India

**Poster Presentation - Venue: Art Gallery**

**Chairperson:** Dr. Marykutty Mammen, South Africa

1. Rural-urban differentials in prevalence of non-communicable diseases among women: insight from NFHS-3- Mr.Shubhranshu Kumar Upadhyay, India
2. Prevalence and factors influencing depressions among elderly in an urban community - Mr.Pracheth R, Mr.Mayur S S, Mr.J V Chowti, India
3. The effects of short term physical activity intervention programmed on body mass index, blood pressure and percent age body fat among high school children in villages of Mysores district, Karnataka- Mr. Saikrisnan V, India
4. Can behaviour change communication (BCC) Intervention reduce the risk factor of type-2 diabetes?: study amongst high risk adults in tribal area of Thane dist- Dr.Pallavi Bhimrao Kunde, India
5. Rehabilitation of HIV/AIDS infected children and family – Santosh Pawar, India
6. Upper limb deep vein thrombosis – Dr. Piush Marathe, Loni, India Reexpansion Pulmonary edema – Dr. Amol Avinash Mahajani, Loni, India
Tuesday, 11th December 2012

Keynote Addresses
9.00 am – 9.40 am on 11.12.2012
Venue: DMKM

Keynote 3: Rural Health Options and Approaches: Dr. Ramesh Govindraj, World Bank, India
Keynote 4: Appropriate Technology in Health: Dr.A.Sivathanu Pillai, CEO, Brahmos, India

Continuing Medical Education (CME) on Reforms in Medical Education for Improving Rural Health
9.40 am – 11.00 am on 11.12.2012
Venue: DMKM

Chairperson: Dr. T.P. Ahluwalia, India Co-chairperson: Prof. Mark Jones, Australia

1. Migrant & Minority Health -the development of a M.Sc., Curriculum in migrant health - Prof. Hans-Joachim Hannich, Greifswald University, Germany
2. Keys to the Successful Sustaining of Rural Primary Health Care: The Politics and Realities of Rural Health Education and Rural Health Services in Canada - Dr. Jill Konklin, Alberta University, Canada
3. Review of reforms in medical education from a public health angle - Dr. Sudhir Sathpathy, AIPH, India
4. The Process of Student and Preceptor Visitation: The Hinton Integrated Community Clerkship Experience - Dr. David Moores, Alberta University, Canada
5. University Ranking & Benchmarking: Perceptions of a Developing Country University - Dr. S.D. Dalvi, PIMS-DU, India

Screening of Video Film: Tohoku earthquake
11.00 am – 11.30 am on 11/12/12
Venue: DMKM

Parallel Scientific Session 7
Occupational & Environmental Health
11.45 am - 1.00 pm on 11.12.12
Oral Presentation - Venue: DMKM

Chairperson: Dr. Jill Konkin, Canada Co-chairperson: Dr. Sudhir Sathpathy, Orissa

Lead Speaker: Dr. María Theresia Espinosa, Colombia on Health Surveillance in Workers Exposed to Pesticides – Experiences in Latin America
1. Evaluation of a Swedish program on injury prevention in rural farm business - Dr. Peter Lindqvist, Catharina Alwall Svennefelt, Stefan Pinzke, Sweden
2. Practices related to drinking water in a rural block of Haryana- Dr B M Vashisht, India
3. Patterns of effective utilization of rural health service in work related low back pain 0n Agricultural workers: A prospective study- Dr Gopal Nambi S, India
4. Diagnosis of occult fractures of the ischiopubic rami- Dr. Koji Suzuki, Japan
5. A study of cashew nut processing industry workers in rural Andhra Pradesh - Dr Shilpa P Lanjewa, India
6. Staphylococcus aureus – prevalence status of multiple resistance strain & its hazards in rural community - Dr. Visnuninayagam, India
7. Antibiotic resistant Escherichia Coli in drinking water of the tribal community of Maharashtra, India - Dr. Nerkar Sandeep, India

Poster Presentation - Venue: Art Gallery

Chairperson: Dr. Neesha K. Shinde, Loni
1. Health hazards of Indoor Air Pollution in Indian Perspective- Ms.Julie Desai, India
2. Strychnine Poisoning - A dilemma in emergency- Mr. Rabin Bhandari, Nepal
3. Revealing genetic mechanism of CR (vi) induced toxicity in caenorhabditis elegant- Shilpi K Saikia, India
4. Study of Clinical Profile of Patients Presenting with Snake bite in Rural Population of Maharashtra- Mr. Bagrecha M V, Mr.Talele, India
5. A Study to evaluate the effectiveness of multi-disability training of CBR workers in rural district of Karnataka- Vijay Samuel Raj, India
6. Changing trends of poisoning in Indian villages with the emergence of new poisons; A challenge to rural health- Dr. Alok Kumar, India
Parallel Scientific Session 8
Mental Health & Disaster Medicine for Rural Areas
11.45 am – 1.00 pm on 11.12.12
Oral Presentation - Venue: Black Box
Chairperson: Prof. Hans-Joachim Hanich Germany  Co-Chairperson: Dr. Ranganath BG, India
Lead Speaker: Dr. V.K. Singh, India on “Disaster Medicine in Rural Areas
1. Japanese reaction to radioactive pollution Occurred by the nuclear power plant accident associated with the Japan huge earthquake- Dr. Kiyoshi Ohara, Japan
2. Response and agenda of our hospital to great east Japan earthquake - Dr. Shin Tsuruoka, Japan
3. The roles of primary level health worker in delivering rural mental health care in India- Ms. Nadja van Ginneken, India
4. A status of depression in persons with and without disabilities in rural settings-Mr. Sherin Abraham, India
5. Study of stress factors amongst students of private allopathic medical college- Dr. Harishchandra Dyanoba Gore, India
6. Prevalence and determinants of depression among elderly in rural, Wardha, Maharashtra, India- Mr. Vikash Kumar, India
7. An epidemiological study on depression among college students in district Faridkot, Punjab - Mr. Padda P, India
8. A study to assess the stress and coping among widows residing in selected areas of Udupi district- Ms. Avita A.A Fernandes, India

Poster Presentation - Venue: Art Gallery
Chairperson: Dr. Tazawa Jyunichi, Japan
1. A preliminary study of perceived stress and stressors among undergraduate students in rural Haryana- Dr. Abhishek Singh, India
2. Screening for depression in elderly- Raul Anagha.V, India
3. From mother in law to daughter in law: examining inter generational association in fertility behaviour in rural Bihar India- Mr. Abhishek Kumar, India
4. Profile audit of ICTC clients attend institute of medical science BHUMs. Rashmi Kumari, Mr. A K Gulati, Mr. Shyam sundar, Mr. S C Mohabatra, India
5. Knowledge, attitude and practice of epilepsy among patients and family members attending urban health and training centre(UHTC), Shahganj, Aurangabad- Ms. Hashmi S J, Ms. Dixit J V, India
6. Efficacy of vestibular stimulation exercises on posture and balance in children with cerebral palsy- Tahura S Mohammad, India

Parallel Scientific Session 9
Rural Demographic Challenges
11.45 am - 1.00 pm on 11.12.12
Oral Presentation - Venue: Rehearsal Hall
Chairperson: Dr. Andrej Woytula, Poland  Co-Chairperson: Dr. Meghachandra Singh, India
Lead Speaker: Dr. Istavan Szilard, Hungary on Migration and Health
1. Gender Compostion in Indian Population – Trends, issues and concerns- Dr. Chandrika Raval, India
2. A Cross-sectional Study of Physiological Health parameters of aging population in a village in Maharashtra - Dr. Ghazala Mulla, India
3. A Study to assess the knowledge regarding selected aspects of Healthy lifestyle among geriatrics in selected area of Kolhar- Mr. Pankaj Kale, India
4. Morbidity data and K.A.P. of health seeking behavior of rural elderly in Maharashtra- India - Dr. Musarrat Nafees, India
5. A Study on attitude of parents towards girl child in rural and urban area at Rahata in Ahmednagar District- Mrs. Yogita Pankaj Autade, India
6. The Effect of Physical and Cognitive Functions on Mortality Risk by Frail Persons in Japan – Results of a Four-year Cohort Study- Jung-Nim Kim, Japan
7. A Study to Assess the Effectiveness of Video Assisted Teaching module on preventive, Measures on Osteoporosis among Elderly Women in rural population- Vinolma Raj, India
8. Is short term physiotherapy effective in sarcopenia: A case study- Sant S.S, Shete Dr Khatri S.M & Deepali Hande, Loni, India

Poster Presentation - Venue: Art Gallery
Chairperson: Prof. Jinseok Kim, South Korea
1. The assessment of nutritional status of the elderly and effects of meal services and nutrition education on nutritional status of the elderly in risk of malnutrition in rural area- In Kyung Hwang, South Korea
2. The analysis of serviced intervention programmes on grand-parents grand children family in rural Korean area- Dr. Cho Yoo Hyang, South Korea
3. The health of the elderly in India: a empirical study of rural Uttar Pradesh and Kerala - Mr Pawan Kumar, India
4. Young males: Messengers of gender equality - Kuwatada J.S, India
5. Related factors concerns the quality of life of the elderly population on a remote island- Kanae Hamano, Japan
6. The influence of condom use attitude on HIV/AIDS risk behaviour STI prevalence among male migrant workers in North India - Shashikant, India
7. Assessment of magnitude and pattern of physical disability among geriatric population in Delhi - Dr Anika Sulania, India

**Parallel Scientific Session 10**

**Women's Health & Empowerment**

2.00 pm - 3.30 pm on 11.12.12

**Oral Presentation – Venue: DMKM**

**Chairperson:** Dr. Dhruv Mankad, India  
**Co-Chairperson:** Ms. Nandini Charles, India  
**Lead Speaker:** Dr. Kurus Coyajee, India – Maternal Mortality in Maharashtra

1. Study of Intimate Partner Violence against Women in an Urban Area - Dr. Kevin Fernandez, Dr. Dhrubajyoti Debnath, India
2. Risk factor associated with lumbar and femoral bone mineral densities in post menopausal Japanese woman - Yoshiaki Somekawa, Japan
3. Health revolution: A way to empower rural women- Dr. Sita Mishra, India
4. Infertility observed in community study “Stree Arogya Shodh”, A Women's health programme in Goa, India – Ms. Sulochana Pednekar, India
5. Nutrition knowledge of reproductive age group rural woman of Tamilnadu an educational interventional study - T. Vijaya Pushpam, India
6. A study of awareness of Janani Suraksha Yojana among ANC registered woman in a primary health center of tribal area- Dr. Vijay Kumar Singh, India
7. Reproductive tract infection among married women in rural Maharashtra- Dr. Smita Chavan, India
8. Maternal intake and birth size in mothers from low socio economic classes in Pune - Mrs. Swati S. Raje, India
9. Women self employment through children nutrition- Dr. Neelofer Illias Kutti, India

**Poster Presentation – Venue: Art Gallery**

**Chairperson:** Dr. K.A. Masali, Karnataka, India

1. Prevalence and biosocial correlates of primary infertility in rural field practice area of Kempegowda Institute of Medical Sciences, Bangalore - Ms. Shilpa, India
2. Induced abortions and concurrent adoption of contraception- Dr. Rachana AR, India
3. A study of unmet need for family planning among pregnant women attending antenatal clinic of primary health centre, kengeri, Bangalore- Dr. Veena V, India
4. Urban rural performance of maternal social security scheme Janani Suraksha Yojana and universal immunization programme in central India- Dr. Shilpa P. Linjewar, Dr. Sanjeev Dr. Sanjay Dr. Prakash Dr. Harsha, Meshram India
5. Effect of literacy on family planning practice among married women in rural south India- Mr. Rizwan S A, India
6. Exploring women's health in rural India: evidence from large scale study - Ms. Pallavi Gupta, India
7. A cross sectional study of socio demographic pattern of women of reproductive age group with reference to family welfare goals challenge persist - Dr. Rakesh Balaji Waghmare, India
8. Contraception awareness and practice in ANC mothers - Dr. Nikunj Fofani, India
9. Contraceptive prevalence, attitude and choice among women of reproductive age group in a rural area of Jammu- Dr. Tajali Nazir Shora, India
10. Prevalence of unmet need for contraception and predictors of non usage of contraceptives in rural Haryana - Dr. Harshdeep Joshi, India
11. Risk factors for utero vaginal prolapsed- a community based study from doti district of Nepal- Mr. Damaru Prasad Paneru, India
12. An epidemiological study of reproductive tract infection among women of reproductive age group in rural health training centre area palawa, Ujjain(MP)- Mr. Pal Rabindrakumar, India
13. Gender preference and awareness on sex determination among married women in Ranchi- Dr. Monolisa Sahul, New Delhi, India
Parallel Scientific Session 11

Child Health

2.00 pm - 3.30 pm on 11.12.12

Oral Presentation - Venue: Black Box

Chairperson: Dr. Umesh Kapil, India  Co-Chairperson: Prof. R.S. Goyal, India

1. Screening for nutritional status as a tool for reducing morbidity of growing age children in Delhi - Dr Pankaj M. Kasdekar, India
2. To study the effect of therapeutic non thermal ultrasound in post partum Breast engorgement - Dr. Keerthi Rao, India
3. Traditional beliefs & practices regarding new born care among post natal mothers residing in rural areas of Alandidevachi of Pune District - Mrs Rupali Salvi, India
4. A study to assess the customs and cultural practices related to premature care among selected tribal community of Ahmednagar District Maharashtra - Mrs Bhasura Chandrachood, India
5. Gender equality' of primary immunization coverage in rural area of Maharashtra - Smita Valekar, India
6. Attitudes towards disabled children: a qualitative study in rural region of Maharashtra - Dr. Mahendra L. Shende, India
7. A study to assess the effectiveness of planned teaching on the complimentary feeding practices - Angela A Joseph, India
8. A study of the Husband's involvement in Wives health during pregnancy and child birth in urban and rural areas of West Bengal - Dr. Sampa Mitra, India
9. Can school health promotion activities and policies be the answer to the healthy future of children? A cross-sectional descriptive study of CBSE schools India – Dr. Vikram Niranjn, Aurangabad, India

Parallel Scientific Session 12

Adolescent Health

2.00 pm - 3.30 pm on 11.12.12

Oral Presentation – Venue: Rehearsal Hall

Chairperson: Dr. Hwang Inkyung, South Korea  Co-Chairperson: Ms. Julie Desai, VGS, India

1. Adolescent health problems in rural Goa - Dr Mrinalini Sahasrabhojanee
2. Comparative study of KAP on menstruation & menstrual hygiene in rural & urban area of Nagpur District - Dr. Ankit Viramgami, Dr. P.B. Verma, Dr. A.M. Kadri, Gujarat, India
3. A cross sectional study of common health problems of school going children in District Muzaffarnagar UP - Muzammil
4. A study of the symptoms of Gastro Oesophageal Reflux Disease & associated risk factors among the rural school of Veluru India- GJahnavi, India
5. A study to assess the prevalence of health problems among school age children in a rural school-Ms V Radha, India
6. A descriptive study to identify the prevalence of anemia among adolescent girls of a rural school & planned intervention as per felt needs-Ms Shobha Naidu, India
7. Dietary iron intake, prevalence of anemia and iron status of adolescent - Dr. Monalisa Sahu, India
8. Effectiveness of health education program on awareness of menstrual hygiene among adolescent girls- Mrs Kalpana Kale, India
9. Evaluate the eating behavior among adolescent girls of rural area- Mrs G. Vimala, India

**Poster Presentation - Venue: Art Gallery**

**Chairperson:** Dr. Vijay Lakshmi Priya, Chennai, India

1. Prevalence of anaemia in rural adolescent girls of southern district of Rajasthan- Dr. Chetan Kumar Jain, India
2. Comparative study of menstruation in rural and urban area of Nagpur district- Dr. Rupali R Patle, India
3. Interventional study to access nutrition related knowledge amongst adolescents – an urban –rural comparison – Dr. Arti Pokale, India
4. A study of teenage pregnancies in rural area- Mr. Pranay Gandhi, India
5. A cross sectional study to assess perceptions and practice related to menstruation and menstrual hygiene amongst tribal adolescence girls in rural field practice area of territory health care institute - Dr. Pravin D Mesharam, India
6. Quality of life and nutritional status selected adolescence of Chennai- Ms. Vijayalekshmi Priya Y, India
7. Morbidity pattern and personnel hygiene in children amongst private primary school in urban area-Are the trends changing?- Dr. Ritesh P Kundap, India

**Parallel Scientific Session 13**

**Appropriate Technology & ICT in Rural Health**

4.00 pm - 5.30 pm on 11.12.12

**Oral Presentation - Venue: DMKM**

**Chairperson:** Dr. S Pillai, Brahmos, India **Co-chairperson:** Dr. V.K. Singh, Simpler, India

1. Ventilator Technology for Rural Areas – Dr. Dhananjay M. Ghaisas, India
2. Clinical utility of electronic balance board and treadmill training in Pott's Paraparesis – A case study - Dildip Khanal, Subhash Kahatri, R.M, Singaravelan & Deepak Anap, India
3. Global positioning system – A new tool to measure the distribution of anaemia and nutritional status of children (5-10 yrs) in rural area south India- Malatesh Undi, India
4. An In-house Approach to Combat Micronutrient Deficiencies in Madya tribes of Gadchiroli- Mr. S.D Patankar, India
5. Socio demographic evaluation of home deliveries in Taluka Saoner District Nagpur in the year 2011-2012- Dr. Rajatna Ramteke, India
6. A Cross Sectional Study to Assess the Scope Implementation, and Utilization by Rural area of Telemedicine System located in an Apex Institute- Dr. Sumit Ghansham Wasnik, India
7. Rural health 2.0 & User Driven Health Care – Mr. Shoubhik Bose, Accenture, India
8. Empowerment of rural people through e-health – A case-study of Pravara Prof. K.V. Somasundaram, India

**Parallel Scientific Session 14**

**Alternative & Indian System of Medicine**

4.00 pm - 5.30 pm on 11.12.12

**Oral Presentation - Venue: Black Box**

**Chairperson:** Dr. Subodh Tiwari, India **Co- Chairperson:** Dr. Srinivas Rairikar, India

**Lead Speaker:** Mr. Subodh Tiwari – “Yoga as an effective means of health management”

1. Evidence based transitional research in vascular blocks - Dr Vinod Marathe, India
2. Simple meditation and japa for creating strong mind for strong body or Self management Skills through Meditation & Japa for better Health -Dr. Srinivas Rairikar, India
3. Prakruti individualistic outlook - Dr Anura P Bale, India
4. Impact of Rashi, Graha, Nakshatra on human health – An Ayurvedic Perspective – Dr. Manish Kanhed, India
5. Investigation of age related differences in prophylactic effects of BCG intravesical instillation therapy against non muscle invasive bladder cancer in Japanese rural area-Mr. Takehiko Okamura, Japan
6. To find out the scientific way of homeopathic management for the patient suffering from Psoriasis- Dr. Gopalghare Sominath Navnath, India
7. The radical role medicinal plant extract in stem cell therapy of incurable diseases- Dr. K V Pathak, India

**Poster Presentation - Art Gallery**
1. Role of Ayurveda in health care system of India- Dr. A.J dixit, India
2. Assessment of AYUSH specialties and services under NRHM at a southern district of Rajasthan- Dr. Arun Kumar

**Parallel Scientific Session 15**
**Rural Health Research**
4.00 pm - 5.30 pm on 11.12.12

**Oral Presentation - Venue: Rehearsal Hall**

*Chairperson:* Dr. Hideomi Fuziwara, Japan  
*Co-Chairperson:* Dr. Ravi Duggal, India

1. SWOT analysis of public private partnership of a Primary Health Centre in Kolhar -Ranganath B G, India
2. Health in Transition – A Study of disadvantaged people in Rural Areas – Dr. P.C. Upadhyaya, India
3. Efficacy and ethics of artificial nutrition supply in patients with neurologic impairments in home care at the rural setting in Japan- Shuzo Shintani, Japan
4. Functional electrical stimulation (FES): an indigenous mode of stimulation for foot drop patient- Mr. Saikrishnan V, India
5. Community based monitoring and planning of health services in Maharashtra – A process to improve access, accountability and quality of health care services-Dr. Nitin Jadav, India
6. Effect of economic security on health of elderly women: a study of rural India- Ms. Kshipra Jain, India
7. Food expenditure Pattern of village: PMT District of Tamilnadu-Ms. Silvia Fernandis
8. Effect of Kegel's Exercise on postpartum perineal fitness: Randomized control trial- Dr. Neesha Kiran Shinde, India

**Wednesday, 12th December 2012**

**Keynote Address**
9.00 am – 9.30 am on 12.12.2012  
**Venue: DMKM**

**Keynote 5:** Financing Rural Health Care - Dr. Syeda Hameed, Member - Health, Planning Commission, Government of India

**Plenary Session on Financing Rural & Child Health Care**
09.30 am - 11.00 am on 12.12.12  
**Venue: DMKM**

*Chairperson:* Dr. Ramesh Govindraj, India  
*Co-Chairperson:* Dr. Hae Sung Nam, South Korea

1. Financing Rural Health Care - Dr. Somil Nagpal, World Bank, India
2. Role of Private and Public Sectors in Rural Health Financing - Dr. Ravi Duggal, Mumbai, India
3. Child Health Expenditure in India - a comparison of less developed and benchmark states - Dr. Indranil Mukhopadhyay, PHFI, India
4. Whether health care development investments contributes to improve health outcomes for urban poor: A comparative analysis urban poor, non poor & rural populations in India - Prof R S Goyal, Dehradun, India
5. Unmet Health Needs of Rural people: Is Community Financing a Solution?- Dr. Dhruv Mankad, Mumbai, India

**11.00 am - 12.00 noon:** Discussion on Goa Declaration – Chairperson: Dr. Syeda Hameed, Govt. of India

**12.00 noon - 01.00 pm:** Concluding Ceremony (Deenanath Mangeshkar Kala Mandir)  
Presentation of Goa Declaration: Dr. Ashok Patil
Concluding Address: Dr. Syeda Hameed, Govt. of India
Vote of Thanks: Mr. Ramakant Khalap
Absrtact

Plenary Session on Strategies for Rural Health in a Global Village

Strategies For Injury Prevention In Swedish Agriculture
Peter Lundqvist, Catharina Alwall Svennefelt
Department of Work Science, Business Economics and Environmental Psychology, Swedish University of Agricultural Sciences, Box 88, 23053 Alnarp, Sweden, Phone: +4640415495, e-mail: peter.lundqvist@slu.se

Keywords: injuries, strategies, agriculture

ABSTRACT

Aims / Objectives: In order to change this negative situation for the agricultural industry, a number of measures have been initiated. The strategy involves factors, such as: 1) Increased collaboration between involved stakeholders of health and safety in agriculture, 2) A national program on injury prevention and 3) Coordination of actions

Methods
The coordination is done through the Swedish Committee on Working Environment in Agriculture. It is a network working for a good, healthy and safe working environment in Swedish agriculture.

Results & conclusion
Examples of activities & partners which are included in this strategy:
- The Swedish Work Environment Authority has a project with inspections on farms with the aim to reduce the number of injuries.
- The Federation of Swedish Farmers with the support of Swedish Institute of Agricultural and Environmental Engineering and Swedish University of Agricultural Sciences are running a national program “Safe Farmers Common Sense”.
- The Federation of Swedish Forestry and Agricultural Employers, has a project with farm safety extension service to their members. The service is provided by safety engineers make on-farm visits in order to help the farmers to cope with safety issues.
- The Farm Workers Union, have regional safety representatives which gives advice on injury prevention for their members as well as employers on farms to reduce the number of injuries.

The quality of treatment was satisfactory and this policy is considered necessary to maintain the quality.

Multi-Sectoral Approach Model for Sustainable Health & Development
Dr. Ashok Patil, President, IARM, India

Key Words: infant mortality, institutional deliveries, maternal mortality, MDG 4 & 5, prevention, training of trainers.

ABSTRACT

A project was initiated to develop a Model For Sustainable Health & Development in 235 villages of Maharashtra distributed in three agro-climatic and geo-political areas.

The three areas were namely Tribal (100 Villages), Irrigated and well connected (100 Villages) and remote and dry (35 villages), covering a population of 500,000 people.

The study and interventions were carried out over a period of three years, which was finally extended for another year. The project was funded by Swedish International Development Agency and was a partnership between many Governmental and Non Governmental agencies including two Swedish Universities and One Indian Medical University.

India is 126th in its Millenium Development Index ranking and most of the MDGs are directly or indirectly related to Health. India accounts for 18% of worlds infant mortality and almost a similar burden due to Maternal Mortality. Five key areas were identified and about 76 interventions were made to develop this model, each with some parameters which could be measured quantitatively.

The results showed that Maternal mortality decreased from 478 to 121 per 100,000 live births. Infant mortality decreased from 80 to 43 per 1000 live births. Women and children referred to specialist care increased considerably and institutional deliveries increased from 47 to 74%.

The key areas identified were –
A. Service Delivery and Access on the Swedish Pattern of Reproductive &Child Health, Primary Health Care approach, Youth Clinics etc.  B. Gender Inequality & Socio-cultural Aspects  C. Awareness Generation  D. Nutrition  E. e-health & Empowerment
Continuing Medical Education (CME) on Reforms in Medical Education for Improving Rural Health

Migrant and Minority Health – the development of a MSc-curriculum in Migrant Health

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Keywords: Migrants Health, Intercultural Competencies, Health Education

ABSTRACT

Aims: For protecting the physical and mental health of migrants in their host country, a multifactorial approach is needed. Experts with specific migrants-related knowledge have to be trained by institutions of higher academic education to enable them to meet the complex task of migrants' health assurance.

Material & Methods:
In such a training programme, two dimensions are important:
• Assessment of risk-factors on the physical and mental health of migrants
• Development and implementation of intervention strategies for maintaining a sustainable health status in migrants.

Following core competencies have to be trained:
• Intercultural competences
• Risk-assessment strategies from a bio-psycho-social perspective
• Problem-solving-, cooperation- and communication-skills.

Funded by the EU, a consortium of European universities is developing a teaching curriculum for future experts in migrants’ health. It includes the modules:
• Economic and health economic impacts on migration (University of Pécs, Hungary)
• Organisation and system management (Donau-University Krems, Austria)
• Epidemiology and research methods (University of East-Anglia, Norwich, UK)
• Clinical and public health assessment (University of Kosice, Slovakia)
• Social and cultural aspects on migrants’ physical and mental health (University Medicine Greifswald, Germany, Medical University Graz, Austria)
• Environmental and occupational Aspects on Migrants’ Health (University of Pécs, Hungary)

Results:
The graduates of this programme will attain an European Master in Migrants Health. By supporting a successful integration of migrants into their host country the future experts will thus make a contribution to maintain the health of an important population group in modern western societies.

Keys to the Successful Sustaining of Rural Primary Health Care: The Politics and Realities of Rural Health Education and Rural Health Services in Canada

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ABSTRACT

Recruitment and retention of rural physicians has been and continues to be a challenge in Canada. These challenges are not exclusive to Canada and exist in other parts of the world.

With only 33 million people, Canada is the second largest country in the world (9,984,670 km2/3,855,100 miles2). Health care is a provincial responsibility so there are initiatives in all 10 provinces and 3 territories but no coordinated national plan. The variables affecting the choice of a rural practice site and the necessary educational/training initiatives and the infrastructure required to enhance the recruitment and retention of rural family physicians have been identified. Effective solutions are complex and interrelated and depend on an individual’s choosing medicine as a career and family medicine as a discipline. Initiatives affecting acceptance into medical school, the undergraduate curricula, postgraduate education and training, and continuing medical education and professional development should be implemented.

This paper reviews key milestones and some successes in Canada’s addressing its rural and remote medical practice challenges. It outlines the comprehensive and integrated initiatives developed in Canada and elsewhere. It highlights programs at the University of Alberta, in particular in undergraduate medical education, developed to better meet its social responsibility to rural citizens and their communities.
Review of reforms in medical education from a public health angle
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ABSTRACT
India, even after 65 years of independence, is still struggling to deal with the availability, accessibility, quality, accountability, affordability and equity issues in delivery of health care services to its 1.21 billion people, most of whom (68.8%) live in rural areas. Current health and health service coverage indicators signifies the inadequacy and inequitable distribution of health resources and health manpower especially the MBBS doctors and specialists in rural areas. More than 30,000 MBBS doctors and 18,000 specialists pass out from 355 medical colleges in the country every year but most of them are urban based. About 75% of health infrastructure, medical manpower and other health resources are concentrated in urban areas where 31.16% of India’s population lives.

We are still debating on what kind and how many doctors and specialists we need to take care of the health of majority of people living in rural areas and urban slums. We know that ninety per cent of all health care needs in any community can be delivered through strengthening of primary and secondary level facilities. The lessons learnt from previous concepts like "basic doctor" and "social physician", the 'Reorientation of Medical Education' experiment of 1977, the emphasis on the need for specialists in 'Public Health' and 'Family Medicine' in the National Health Policy of 2002, and latest concept of "Indian Medical Graduate", the proposed reforms in undergraduate medical curriculum as envisioned in Mission 2015(MCI), the concepts of alternatives like “Bachelor of Rural Medicine and Surgery”, involvement of AYUSH Doctors, and trends in public health education are discussed. A sound medical education and health manpower policy, an appropriate twist to the medical education towards public health and family medicine at undergraduate, postgraduate and continuing medical education level, creation of Public Health Cadre and more Public Health Specialists is the need of the hour to address the complex and changing health care needs of the people in India.

The Process of Student and Preceptor Visitation: The Hinton Integrated Community Clerkship Experience
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ABSTRACT
Hinton, Alberta is one of nine (9) designated communities supporting the Rural Integrated Community Clerkship (ICC). This program is a core clerkship option for third year medical students. Students may apply to be placed in a rural community for approximately 41 weeks of their third year. The Rural ICC was developed in collaboration with the University of Calgary and is based on successful programs in other jurisdictions. It was implemented at the University of Alberta in September 2007.

The ICC is a patient-centred, community based clerkship in selected rural Alberta communities. It uses rural family medicine practices as the core of a pedagogically sound clerkship experience that provides students with continuity of patient care, continuity of supervision (preceptor) and continuity of learning environment. Continuity of care leads to meaningful therapeutic relationships, experience in handling undifferentiated problems, coordination of care of individuals with chronic disease, and the integrated assessment and management of the key illnesses seen in core disciplines of medicine. Students meet the same objectives as their urban rotation-based clerkship colleagues and learn medicine in an integrated fashion through the patients they follow in all venues of care: hospital, home, clinic.

This paper identifies the purpose and content of the regularly scheduled visits to students and their preceptors in these rural communities.

University Ranking and Benchmarking Perspective of Developing Country University
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Key Words: Benchmarking, Accreditation, Higher education, Medical care

ABSTRACT
University Ranking and Benchmarking- Perspective of Developing Country University Ranking, Benchmarking and Accreditation are useful tools which are good for universities for enhancing quality and for staying competitive. Ranking provides tools used by institutions to determine level of performance, to build professional reputation, to seek support for funding and to help students to make choices. Benchmarking transforms organizational processes into strategic tools, helping higher educational institutions to compare systematically their practice and performance with peer institutions. There are different types of benchmarking like internal benchmarking, competitive benchmarking, collaborative benchmarking. Shadow benchmarking and Best-in-class benchmarking. Educational accreditation is a type of quality
assurance process under which services and operations of educational institutions or programs are evaluated by an external body to determine if applicable standards are met. If standards are met, accredited status is granted by agency. In developing countries the objectives of university education are modified to suit the needs of the country in the light of National goals. The education should be developed so as to increase productivity, achieve social and national integration, accelerate the process of modernization and cultivate social, moral and spiritual values. The five goals of higher education includes Greater Access, Equal access, Quality and Excellence, Relevance and Value based education. Pravara Institute of Medical Sciences is deeded university in the rural India. Academic activities and research excellence along with quality medical care rendered to rural community are the three main pillars during last 42 years. Since genesis of this deemed university is in this co-operative movement of integrated development model, the reasons for genesis shall be better guide for the benchmarking. The participative model of Integrated Rural Development evolved at Loni has been well appreciated by Dr. A.P.J. Abdul Kalam, Former President of India as “A Role Model” for development of Rural India and has been referred by him as operative model of PURA (Providing Urban Amenities to Rural Areas).

### Plenary Session on Financing Rural & Child Health Care

**Role of Private and Public Sectors in Rural Health Financing**

Ravi Duggal, International Budget Partnership, Mumbai

**ABSTRACT**

At the outset let me state that there is no such thing as rural health financing. In the context of universal access that dominates the global agenda/debate on healthcare, health financing is a significant means of achieving equity and nondiscrimination in access to healthcare. This is not to deny that rural and urban areas are very different in terms of problems, availability of health resources, infrastructure etc. – the rural areas are clearly disadvantaged. Nevertheless the financing strategy for healthcare too needs to be universal and equitable.

Rural areas across India are clearly worse off in terms of availability of health infrastructure and resources both in the private and public sectors. The qualified private sector, especially of the allopathic variety has a very weak presence in rural areas, though overall availability of private practitioners, mainly non-allopathic and unqualified are a significant number. The rural public sector is more or less equally entrenched across rural India because of the standard geographical/population norms for sub-centres, PHCs and CHCs but while the physical infrastructure in most places may be in place the human resources, especially doctors and nurses, are grossly inadequate. Utilization of healthcare data clearly shows that in rural areas for out-patient care the public sector is an insignificant player overall (22%), though in some states like Mizoram, Puducherry, J&K, Himachal, Orissa, Rajasthan etc., it may be significant. In the case of hospitalizations the use of public facilities is down to less than half (42%) on the average in rural India but many states like all NE states, J&K, West Bengal, Orissa, MP, Rajasthan and Puducherry still predominantly use public hospitals for such care.

The declining public sector utilization as evidenced by the various Rounds of NSSO surveys (42nd, 52nd and 60th) has been largely due to declining budgetary commitments to healthcare on the one hand and the unregulated growth of the private health sector, including health insurance, on the other. The UPA government’s commitment of 2 to 3 percent of GDP for public health is nowhere in sight, despite the HLEG report recommendations. The draft chapter of the 12th Five Year Plan does not show any promise and has even been rejected by the Ministry of Health. The solution clearly lies, based on global experience, in restructuring health financing to eliminate out of pocket payments, budgeting more than twice the current commitments, strengthening the public health system, especially primary care and reining in the private health sector through regulation under an organized health care system financed by a single payer mechanism. This is the only way to eliminate the discrimination of rural India as well as to establish overall equity in access to healthcare.

“Child Health Expenditure in India a comparison of less developed and bench mark states".

Dr.Indranil Mukhopadhyay, Dr Alex George.

**ABSTRACT**

Investin in childerhas tremendous potential for enhancing human development. A country characterised by the prevalence of high levels of malnutrition and undernourishment, infant mortality and multiple problems at the early stage of development necessitates examining the policies, programmes and proportion of public expenditure made for the development of child. Strong economic fundamentals and a trend of higher growth, observed in India over the last decade, provide scope for additional public spending on social sector development. In spite of these positive developments, there has not been any substantial increase in health sector spending by the State and Central Government.

The present study makes an attempt to analyse the public spending on health care focusing on child health in the Empowered Action Group (EAG) states and two bench mark states of Kerala and Tamil Nadu which has better child health indicators. The rationale for selecting the EAG states is the continued slow performance in most of the health
indicators in these states and government’s own commitment to improve the health status of people. The objective of the study is to examine the nature of public spending on health, nutrition, drinking water supply and sanitation at the aggregate level in EAG and benchmark states with specific focus on child health. The study covers the period of 2005-06 to 2010-11, focusing on the post-NRHM expenditure trends in the sample states. The study points out that while there are inter-state variations in spending on health and related sectors as per cent of budget. Variations widened when per capita spending is taken into account- better-off states like Kerala and Tamil Nadu, spend significantly higher amount money per capita compared to Bihar and Uttar Pradesh. Among the various sub-sectors relatively low priority on nutrition is a major concern. Over all, in terms of spending on health as percent of NSDP, there is not much of improvement since the introduction of NRHM, even after taking into account the funds devolved by the Centre through the Society route.

**Whether Healthcare Development Investments Contributes to Improve Health Outcomes for Urban Poor: A Comparative Analysis Urban Poor, Non-Poor and Rural Populations in India**

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**ABSTRACT**

It is held that the urban poor (people living in slums or shanty towns) are more vulnerable to health risks (as a consequence of their degraded living environment, poor access to healthcare, irregular employment, widespread illiteracy etc.) than other city dwellers or people living in rural areas. Recent statistics shows that, of the total urban population (343 million) in the country, nearly 100 million (i.e. 29% of total urban population) lives in slums or slum like conditions. As per National Family Health Survey (NFHS) III [2005-06], the health status of urban poor has deteriorated as compared to NFHS II [1999 - 2000]. For example, under five mortality rates among the urban poor (101.3) are nearly three times higher than that of the urban high income groups (34.4). Only 39.9 percent of urban poor children (12-23 months of age) are fully immunized by one year of age. The proportion of severely under-weight children among the urban poor (23 percent) is twice that of the urban average (11.6 percent) and five times (4.5 percent) more than that of urban high income group. It has also been observed that unlike the rural areas, the programs to address the healthcare and related needs in urban poor localities have limited impact on health outcomes. Why? Is it because living environment is quite degraded (inputs are rendered ineffective) or the interventions are not penetrating or accessed by all people? This paper examines this phenomenon. It analyses the health outcomes for urban poor (vs. non poor and rural populations) in contemporary Indian communities against the backdrop of socio-economic and healthcare developments, over a period of time. The data are drawn from two large nationwide surveys (NFHS II and III) carried out in 1998-99 and 2005-06 segregated for urban poor (and non-poor) using wealth index (a composite index reflecting on quality of life and possession of household goods). Individual data for all urban areas for states of Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh, Maharashtra and West Bengal are used for analysis. Outcome health indicators depicted the neonatal, infant and child mortality and fertility levels, anemia among women and children, morbidity among children, adult HIV and TB. To reflect the healthcare development investments; access to flush toilet, children’ complete immunization and access to pre-school centers, use of family planning methods, institutional deliveries, teenage motherhood and higher order births are used. Analysis of trend in health outcomes is not very encouraging. In spite of a significant increase in the healthcare inputs, only neo-natal mortality has shown any notable increase. A multiple correlation analysis between two sets of variables indicates significant positive association between access to flush toilet and malnutrition and morbidity among children (health outcome indicators). It also reflects upon the importance of environmental conditions of living to improve the health outcomes for urban poor.

**Present Status of Cases with Breast Cancer at Saku Central Hospital and Assessment of Treatment Quality**

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**Keywords** Breast Cancer, Medical Care, Sphere, Quality of Medicine

**ABSTRACT**

**Aims/Objectives:** This presentation is an attempt to clarify our hospital's sphere of medical care delivery for breast cancer treatment and its quality.

**Material & Methods:**
We scored the results of sentinel lymph node biopsy (SNB) and breast conserving surgery performed in our hospital. The
identification rate and the axillary recurrence rate were taken up for a qualitative assessment and compared with findings in literature.

**Results & Discussion:**
Of the patients, 31% were living in Saku, 61% in Tohshin and 4% in the districts beyond in 2010, indicating that most patients were from Tohshin. As breast cancer treatment is concentrated in the foothold hospital, those figures undoubtedly reflect the actual status. The identification rate of sentinel lymph node biopsy (SNB) was 99.8% in 531 cases and no auxiliary recurrence was found during the observation period (5 to 79 months). Breast conserving surgery was performed on 70-80% cases after 2001 with the breast conserving rate at 74% between 2001 and 2010. The rate of Intra-Breast Tumour Recurrence was 1.6% in the 5th year and 6.5% in the 10th year. Those results were satisfactory in comparison with those in literature. The policy to support a foothold hospital as in Japan is necessary to maintain the level of treatment.

**Conclusion:**
1. We provided breast cancer treatment in a broader zone.
2. The quality of treatment was satisfactory and this policy is considered necessary to maintain the quality.

**Restructuring Indian Health Care Delivery at the Grassroots**
MRS. Maxie Andrade, Asst. Professor, Community Health Nursing, Dept. Manipal College of Nursing Manipal

**Key words:** Health care delivery, nutrition, primary health care approach

**ABSTRACT**
Planning the decentralized village administration needs thoughtful planning and meticulous attention to minute details of selection of functionaries, clarity of role specifications and job descriptions, ethical issues and legal governance, terms and conditions of employment, etc. It is certain that integrated and decentralized administration may need time to establish but once established may reap greater benefits. This idea is not novel, it is primarily nothing but the concepts of primary health care and Panchayati Raj Institutions, however in a varying form.

**Introduction:**
Health for all, the goal was thought not attained, that is the impact health care system of any nation looks forward to. A healthy citizen is a productive citizen but vice versa may not be true. It is true that man oscillates between the states of health and illness. In which ever state of health an individual is, primary health care is the best approach to restore and maintain health. Primary health care approach is the simple and the best cost effective strategy for health care at individual or national level. Indian administration upholds the principles of primary health care and has demonstrated a growth trend in terms of rise in life expectancy, control of communicable diseases, percentage of trained manpower, investment in health sector and so on. No doubt we will be maintaining the growth trend in coming years, but our current focus is the achievement of millennium development goals (MDG) India's health care delivery system through its vertical structure, is designed to reach the grassroot: “delivery of care to the door steps”. The conceptualization of this structure is though appreciable, the question before us is “Is that the only way to reach the grassroots?” To enhance efficiency in meeting our National Health Policy (NHP – 2002) and MDG goals, should we think of restructuring our health care delivery system? Health care delivery and administration are made simpler now by reducing the population coverage of PHC to 30,000, introducing Indian Public Health Standards (IPHS) and adding a number of grass root level functionaries namely ASHA/USHA, ICTC counsellors, additional laboratory manpower etc. Often a fly away answer to the question on the constraints for realizing our nation's goals are lack of resources but the question is, “Do we really lack resources?”. The introduction of public private partnership (PPP) has brought revolutionary changes in health care industry. This has led to expansion of medical care services and has increased the availability of services. The basic purpose of PPP was to contribute to the collective achievement of our national goals. PPP is a welcome strategy but the rising number of medical care institutions raise two concerns: Why PPP has been concentrating much on curative care initiatives? Secondly why PPP popularized modern medicine more than the indigenous systems of medicine (ISM)? Two prepositions of the systems theory provoke us to reflect on our health care delivery system. They are: 1. A system is a whole that functions as a whole, by virtue of interdependence of its parts. 2. The whole is different from and greater than the sum of its parts. The first denotes the need for intersectoral coordination and is a departmentalized approach. The second reflects on the totality approach. So which approach shall we opt for? Sectarian or collective? However, the choice is ours.

India being the populous and resourceful country, should have been in the list of developed countries before 2000 AD. If we think health of our population can be achieved by deploying more number of medical/auxiliary manpower we are mistaken. There is no point in adding manpower or thinking of building additional health centres or buying costly technology/equipment. Investing more in health sector is neither a remedy as much of our budget is used for salaries/incentives/training or administrative cost. It is best to route the health delivery within the community through its own generated budget with a fixed amount of national/state assistance. Let us not experiment but structure health care
delivery for 24 hour services with emphasis on prevention. PPP can still be applied and all systems of medicine (preferred by the residents) can be practiced under one roof. One of the reasons for India's lag in efficiency is its centralized and disintegrated health care administration. The sectarian approach of past years show that we lag behind our defined targets despite of the increase in GDP. One of the approaches would be to try a collective health care administration at village or grassroot level (Panchayat Raj Institutions – PRI). This idea of integration is to retain people's health in people's hands with effective community participation and free them from dependency on health providers. Currently we do involve health functionaries in village administration, but there is role confusion between health sector and village administration. Health sector currently plays a consultant's role in village administration and concentrates mainly on medical care. In reality health care is much more than medical care and hence should we not attempt to rename our curent designation of health sector as medical care sector? The local daily (Udayavani. 11th Jan 2012) reports 42% children in India are with low weight. The report highlights that parents education and socio economic status did have an influence but a considerable burden of the child malnutrition in well to do and educated families reflects on the lifestyle factor affecting health. Since 7 years, the rate of decline in malnutrition status is at the rate of 2.9%, which is an alarming indicator to Indians despite the increase in literacy rates. We have had implemented nutritional programmes since the republic as vertical programmes, but our progress in nutritional indicators invites us to a second thought on our vertical administration. Providing or supplementing with readymade food will not be an answer to raise nutritional level. We need to increase productivity of each citizen to generate food supplies for their own families and make them self sufficient and self reliant. We should plan production of food grains and manure (based on the soil features) and market the same within the village. Invest on agricultural research to increase soil fertility and promote use of bio-fertilizers. So what can we do?: What we need is a committed, qualified, productive team of village/town planner (civil engineering background), an agriculturist, an environmental expert, the headmistress or the principal of the school or college, a religious representative(s), a statistician, a banker, a lawyer, an elected representative, a youth, a woman representative and a medical expert from ISM (Indigenous System of medicine) and modern medicine in village administration. They may be chosen from the same village or town and an external panel of experts could be elected at district level to play the role as consultants through a qualifying examination of Indian Administrative Service. Too many chefs spoil a broth. Let us have limited number of people in each sub committee, plan fact based feasible solutions, place them in front of the public, gain co-operation and succeed. The village administration may think twice before converting agricultural land or forests into residential plots. The heart of our growth lies in our agricultural lands. Food is our basic need and we should produce the required amount of food within our village and that should be our aim. Import involves a cost factor (transportation, distribution, labor, freight) hence import should be selective. Growth of agricultural activities or small scale industries will build employment. Enhancing community interest in such programmes and maintaining their interest in the same, may be a difficult task, however without pain there can be no gain. Lip service or promises should not be the approach but leaders and residents together should soil their hands or legs, share ideas, visualize and realize goals We must stop provision of readymade incentives to residents (excluding disabled), instead initiate projects with a predetermined percentage of contribution by the resident for basic amenities. We have well established banking systems which can be made use of or we may promote micro – credit systems. There will be strong resistance to subsidized or contributory schemes as the backward classes had been enjoying free benefits since independence. This approach does not mean to be 'Hitlarian', but it is a known fact that caste does not dictate the socio-economic status. Somewhere a revolution has to start and let that start be at lower level. Let our goal be to involve every caste and religion, to do a collective administration and make everyone responsible for their own growth and health. Planning the decentralized village administration may require restructuring the national administration. The venture needs thoughtful planning and meticulous attention to minute details of selection of functionaries, clarity of role specifications and job descriptions, ethical issues and legal governance, terms and conditions of employment, etc. The proposed structure can be piloted and tested. It is certain that such an administration may need time to establish but once established may reap greater benefits. This idea of integration and decentralization is not novel, it is nothing but the concept of primary health care and Panchayati Raj Institutions but in a vairing form.

The idea of integrating the health sector within the village administration may or may not be welcomed by the medical fraternity as they would regard the same as a threat or loss of dignity to the profession. Physician led medical care has been dominating since ages and such a feeling will be a natural reaction. But being a learned and the most respected service profession, it should be a welcome approach by the health care providers. Every health provider realizes that the health maintenance is not the sole responsibility of the provider but it is the collective effort of individual and the community. Health is multifactorial and the majority of risks are environmental than genetic. Moreover, maintenance of health needs a population approach than a risk or disease oriented approach. The best action to realize our MDG and growth goals is investing in controlling environmental factors. When we control them, automatically we can control genetic factors to some extent if not completely. Instead of investing much into genetic research, let us redirect our funds to environmental research especially towards basic needs. Let us residents, not leave the village administration in the hands
of village leaders. Let us realize our role too. Let us share ideas/resources, support realistic decision, promote equality, demonstrate collective efforts and perseverance, solve our own problems and be exemplary in contributing to community upliftment. Let us be active, committed, productive and tolerant of each other. When our community plans programmes for its residents health, is it not the residents responsibility to contribute thier best to its efforts?

**Conclusion:**

Whether we are leaders or residents, let us soil our hands and legs in agricultural fields to produce food or manure, drain the waste, grow vegetation, conserve water, preserve or control damage to our natural resources, participate in research activities and evaluate our contribution. Let us be an active participant of our village meetings or activities. Let us shoulder responsibility for health or illness than blame the administration of any level.

**To Identify the Gaps in the Current Physiotherapy Curriculum Towards Providing Primary Health Care in India.**

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**Keywords:** primary health care, physiotherapy, curriculum, health promotion,

**ABSTRACT**

In India, the involvement of Physiotherapist in PHC probably not still conceptualized. Physiotherapy is a health care discipline well positioned to take on an increased role in PHC. Considering the shift in priorities from acute care to PHC, there needs to be an educational emphasis on interventions from a population health perspective, it was therefore important to review the Physiotherapy curriculum. Aims/Objectives: to identify the gaps in the Physiotherapy education regards PHC.

**Material & Methods:**
- Curricula of undergraduate / post graduate Physiotherapy course of various universities across India was reviewed;
- Largely whole curriculum of each university was divided into three major groups, the basic, clinical and Physiotherapy sciences.
- Clinical and Physiotherapy sciences further grouped on the emphasis each paid on preventive and curative / rehabilitative aspects.
- Contents of various subjects with laid down objective if any was also reviewed.
- Pedagogy and assessment were reviewed.
- Subject/s which laid emphasis on preventive aspects, health promotion especially with regards to chronic / NCD’s was noted.

**Results & Discussion:**
- Most programs provide educational experience of Physiotherapy required for health care in country.
- Pedagogy is by didactic lectures & field trips, camps, etc.
- Most programs emphasize on communication skills especially whilst giving home programs.
- Few programs recently laid down objective to promote health in general, however pedagogy and assessments are not spelt out. Gaps seen were:
  1) inter-professional roles and team function,
  2) therapeutic exercise and exercise prescription,
  3) population health approaches to care;
  4) advanced practice models.

**Conclusion:**
- Uniformity broadly regards objectives, content, pedagogy and assessment.
- The present study noted wide gaps regards to PHC, health promotion / preventive aspects.
- There is need of strategic thinking (short and long term), cognitive demands

**Collaboration Between Hepatologists and Primary Care Physicians in Treating Patients with Chronic Hepatitis C in Japan**

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**Keywords:** Chronic Hepatitis C, Interferon, Primary Care Physician, Collaboration

**ABSTRACT**

**Aims/Objectives:** The purpose of this study was to assess the treatment outcome in patients with chronic hepatitis C (CHC) using the current standard antiviral therapy when patient were treated in collaboration between hepatologists and primary care physicians (PCPs).
**Material & Methods:**
One hundred and ten patients with CHC were treated with a combination therapy of peginterferon-alpha 2b and ribavirin. Among them, 25 patients were treated by a collaboration between hepatologists and PCPs (collaboration group), whereas 85 patients were treated with exclusively by hepatologists (non-collaboration group). The duration of the therapy was 48 weeks for 58 'difficult-to-treat' patients (genotype 1 with a high load of HCV-RNA; 1H patients) and 24 weeks for the remaining 52 patients (non-1H patients). In the collaboration group, antiviral therapy was initiated and adjusted, if needed, by hepatologists (visits every four weeks), whereas the weekly administration of peginterferon-alpha 2b was performed by primary care physicians. Clinical characteristics and the treatment outcome were compared between these two groups.

**Results & Discussion:**
The two groups had similar baseline characteristics. By intention to treat, the two groups showed similar rates of treatment-related serious adverse effects (0% vs. 1%, respectively) and dropout rates for adverse effects (8% vs. 13%, respectively). Sustained virologic response rates were also similar between the two groups, being 42% vs. 39% in the 58 1H patients (NS) and 62% vs. 64% in the 52 non-1H patients (NS), respectively.

**Conclusion:**
Collaboration between hepatologists and PCPs may be a valid treatment alternative to treat patients with CHC using the current standard antiviral therapy.

**Contraceptive Use and Unmet Need in Women of Rural Varanasi**
Shakraka1, Shamshad Ahmad2, Saurabh Singh2, C.P.Mishra3, 1 junior Resident, 2 senior Resident, 3 Professor and Head.
Department of Community Medicine, IMS, BHU, Varanasi

**Keywords:** Contraception, unmet need, RTI/STI, Eligible women

**ABSTRACT**
India suffers from problem of overpopulation. Though the use of contraceptives have increased over the years, India still experiences very high fertility rate. Many women have significant problem in accessing a choice of contraceptive methods.

**Objective:**
To assess the extent of contraceptive use and unmet need of contraception in Rural Varanasi.

**Methodology:**
This community based cross sectional study was conducted in four randomly selected villages of chiraigaon CD Block. Information regarding contraceptive use and unmet need were obtained by interviewing 1100 married women of 15 to 49 years. The study was done using predesigned and pretested schedule and data was analyzed in SPSS16.

**Results:**
The contraceptive use was30.7%. Among the contraceptive methods permanent tube ligation was most popular with 26.0% women ligated, while the minimum was for injectables. 2.3% women were using CuT, 3.2% were using OCP and 8.4% womens’ spouse were using Nirodh. The least popular method was vasectomy(0.3%). Among the women who were not using any contraceptive, 39.5% wanted to adopt some sort of contraceptive method. However a large segment of women were still afraid of using contraceptives or they had no idea of it.

**Conclusion:**
The findings of the present study show the gloomy picture of contraceptive use and awareness in rural area. It suggests the need of strengthening of the family planning programme & ensure proper availability of the contraceptives to fulfill the unmet need.

**Issues of Health Facilities in Guabe Kuje Area council of the Federal Capital Territory, Abuja Nigeria**
Michael Adedotun Oke, Agric Link Multipurpose Cooperative Society Limited, Nigeria

**ABSTRACT**
The Issues Of Health Facilities In Guabe Kuje Area Council Of The Federal Capital Territory, Abuja Nigeria. There are various challenges in the available of the Health facilities in Guabe Kuje area of the Federal Capital Territory, Abuja Nigeria.
Different questionnaires were administer to get the over view of the different health facilities in Guabe, Kuje area council of the Federal Capital Territory, Abuja Nigeria.
This paper look at the various hospitals, the problems associated to health issues and the various challenges related to the health matter. And How International Countries could learn from it.
What Makes Primary Health Center Get Utilized

Dr. Devika Pandurang Jeeragyal, 1st year PG. Community Medicine. PES Medical College. Kuppam, Chittoor Dist, Andhra Pradesh.

**Keywords:** Primary Health Center, Utilization, Human resources, Community participation, Governess.

**ABSTRACT**

The public health system in India has historically emphasized on the need of basic health services for all. As a result a network of PHCs has been established. In India currently there are more than 22,370 PHCs however it has been observed some of these centers get utilised better and some PHCs do not get utilised inspite of having adequate Human resources, Infrastructure, Drug supply etc.

**Aim:**

To explore the factors that contribute to OR Prevent utilisation of services at PHCs.

**Objectives:**

1. Factors contributing utilisation of OPD services.
2. Factors preventing utilisation of OPD services.
3. Frame of factors both contributing and preventing.

**Methodology:**

**Location:** Belgaum Dist., Karnataka State

**Study design:** Qualitative study.

Two types of PHCs were chosen

PHCs that are utilised widely-Having large no. of patients

PHCs not utilised -Having less no of patients

These two PHCs were compared to explore the factors that affect utilisation

**Study Participants:** Health personnel-By interviews And Community –By Focus group discussion.

Total: 26-Interviws and 6-FGDs

**Results and Discussion:**

1. The factors that emerged as imp theams in the study are:1-Head Quater stay- PHCs get better utilised if staff stays at H.Q i.e. availability,accessibility for emergencies.
2. 24 Hours services-Improved the confidence in the community-Better utilised
3. Staff interaction with patients-Good and curteous behaviour- Good Communication, improved utilisation.
4. Reputation/history of PHCs-Good reputation increses utilisation
5. Informal payments:Discourged patients from utilisation
6. Community ownership and Political will-Increases utilisation.
7. Infrastructure:Good infrastructure paves way for better utilisation.

**Conclusion:**

**PHC WELL UTILISED:**

1. Human Resources Staff H.Q.Stay Good interaction with patients 24 Hour Services
2. PHC Image: Good reputation Strong referral network
3. Community Participation: Political will and Community Ownership

Utilization of Government Health Services and Schemes by BPL Rural Families

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**Keywords:** Utilization, BPL, Rural, Schemes

**ABSTRACT**

Achievement of health related indicators of MDG are influenced by utilization of services provided by government. Benefits of these programmes are largely dependent on the penetration of services into the hierarchy of country's socioeconomic system. Rural-BPL families are an important area of concern in determining and implementing health needs of community. Assessing the direct health benefit to families by different schemes and services and their utilization is important to determine success of these government sponsored programmes.

**Aims/Objectives:**

To determine the proportion of BPL families utilizing government sponsored health services and health schemes.

**Material & Methods:**

A Cross sectional study was carried out in a village that won Nirmal Gram Puraskar. All families with valid BPL cards were listed. Assuming that minimum 50% of such families utilize schemes and services offered by government, sample size was calculated as 96 families, representing 95% of families in the village with relative precision of 20%. Families
were selected by systematic random sampling. Data collected was analysed using IBM SPSS version 20.

**Results & Discussion:**
Significant difference is seen in utilization of schemes that offer monetary benefits when compared to those with non-monetary benefits [p<0.05]. Utilization of routine health services is different in various age groups. Females utilized health facilities more when compared to males.

**Conclusion:**
Utilization by rural BPL families of various government health schemes is influenced by the monetary gains. Awareness in rural families about various health services and schemes is significantly different. Difference in utilization of routine health services between sexes is influenced by the availability of more schemes to female population.

**A Study of Knowledge & Utilization Pattern of Janani Suraksha Yojana (JSY) Beneficiaries in Akola District of Maharashtra State.**

Vilas Malkar, Mohan Raut, Umesh Joge, P.R.Bhatkule. Government Medical College, Akola. Assistant Professor, Dept. of PSM, Govt Medical College, Akola, Maharashtra, India

**Keywords:** Janani Suraksha Yojana (JSY), Maternal mortality, Source of JSY information.

**ABSTRACT**
Maternal mortality is a tragic situation as these deaths are not caused by disease but occurred during or after natural process. Each day about 800 women die worldwide because of complications related to pregnancy and childbirth. Developing countries account for 99 per cent of the deaths. Most maternal mortality and morbidity can be prevented if births are attended by skilled health personnel. In 2005 the National Rural Health Mission (NRHM) introduced the Janani Suraksha Yojana (JSY) with the objective of reducing maternal and neonatal mortality by promoting institutional delivery among poor women.

**Objective:**
To study knowledge & utilization pattern of Janani Suraksha Yojana (JSY) beneficiaries.

**Methodology:**
A cross sectional study was conducted to analyze knowledge and utilization of Janani Suraksha Yojana (JSY) in Akola district of Maharashtra state in India from 01/01/12 to 31/06/12. Data was collected from eligible JSY beneficiaries in the district with the help of predesigned, pretested, semistructured questionnaire.

**Result:**
Total 300 women eligible for JSY were interviewed. Maximum (49.00%) were in the age group 20 to 24 years. Out of 300 mothers interviewed, only 216 (72.00%) were aware about JSY scheme, rest 84(28.00%) were totally unaware about it. 68.06% received information about JSY from ANM followed by 40.74% from ASHA. Only 241(80.33%) received monetary benefits under JSY, while 59 (19.67%) did not. Only 66 (27.39%) women were satisfied with the amount received by them. Out of 241 women who got monetary benefit under JSY, 145(60.17%) faced one or more difficulties to obtain it.

**Conclusion:**
Health education by community health workers is very important to increase the awareness about the JSY. At the same time every eligible woman should get JSY benefit and difficulties of them must be promptly addressed for successful implementation of scheme.

**A Cross Sectional Study to Assess the Correlates Influencing Absenteeism of Beneficiaries in Anganwadi’s Affiliated to A Subcenter in Tribal District.**

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**Keywords:** ICDS, PEM, Anganwadi

**ABSTRACT**
The anganwadis of ICDS are prime units for promotion of nutritional practices and prevention of malnutrition. However, absenteeism of the children in anganwadis is a barrier in this endeavour. The present study is to assess the determinants of absenteeism in anganwadis.

**Aims/Objectives:**
1. To study socio-demographic profile of the study participants.
2. To assess morbidities in 3-6yrs children including PEM.
3. To assess the reasons for absenteeism of the children in the anganwadis.
4. To recommend interventions for strengthening regularity of beneficiaries of anganwadis.

**Material & Methods:**
1. Study Design: - Cross sectional study.
2. Study Population/Unit: - 3-6 years of children and their parents, registered with anganwadis affiliated to a subcenter of
tribal PHC.
3. Study Area: -Tribal subcenter in Thane district
4. Study Duration: - June onwards.
5. Sampling Method: - Universal sampling.
6. Sample Size: - 159
7. Statistical Analysis: - SPSS version 16 using frequency and percentages
8. Methodology: - • A semi-structured and pretested questionnaire was designed and anganwadi workers and parents of ICDS beneficiaries were interviewed.

Results & Discussion:
Interim review indicates that the commonest reason for absenteeism is that parents taking their children to fields along with them followed by inability to understand nutritional status of their children and dislike for taste of food by the children. As per the WHO criteria for malnutrition (PEM)-34.8% (55) were normal, 30.3% (48) children were mild, 34.1% (54) were severe malnourished. Morbidity profile-16 (10.1%) had dental carries, 12 (7.5%) common cold, 4 (2.5%) ear discharge and scabies, 3 (2%) children had fever.

Conclusion:
The overall impact of ICDS on malnutrition is very limited. Nutritional therapy of the severely malnourished child is not carried out seriously.

Referral Services of Primary Health Center: An Epidemiological Review
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Keywords: Referral Service, Primary Health Centre, Morbidity, Community Health Centre

ABSTRACT
Timely patient referral system is considered to be an important component of services of Primary Health Centre. Patients requiring evaluation and treatment are referred to a secondary health care facility where advanced management can be provided to them. The present study reviews the modalities of referral system in rural area and identifies scope for strengthening the same

Aims/Objectives:
Aim: To study pattern of referrals and the morbidity pattern of referred patients in selected PHC
Objectives:
1. To study the socio-demographic profile and the time interval for referral.
2. To assess the morbidity pattern and various reasons for referral.
3. To assess the primary treatment and facility provided before referral.
4. To review patient compliance, follow-up status and outcomes.

Material & Methods:
An epidemiological review was carried out of all the patients who were referred to higher centers either directly or after observation was done.

Results & Discussion:
A total of 294 referrals were studied, 59.2 per cent were females and 40.8 percent were males. The majority of referrals were for the age group 21-30 yearold 114 (38.7%). 55.1% of patients presented at PHC within 24hrs of onset of symptoms. 8 % of patients were routinely referred for various reasons. Most common referrals were among women with obstetrics and gynecology problems. Out of which 91.8% were referred to CHC and 8.2% were referred to tertiary hospital. 45.9% of reference was immediate and 55.1% were referred after observing them. PHC vehicle was provided to 22.4% of referrals.

Conclusion:
Referrals pattern indicate scope for fulfillment of unmet needs in terms of enhanced technical competency, supported by appropriate infrastructure.

Revisiting Maternal Health Care Services Utilization Among Rural Married Women in EAG States Amidst Conditional Cash Transfer Scheme: Evidence from DLHS-3
Mayank Prakash, Pallavi Gupta, International Institute for Population Sciences, Deonar, Mumbai, Maharashtra, INDIA
Keywords: Rural, EAG states, Maternal Health Care Services, JSY

ABSTRACT
Coupled with the largest number of maternal deaths, Empowered Action Group (EAG) states top the list of maternal deaths and can retard India’s steady move towards Millennium Development Goals (MDG). Conversely their contribution would be decisive in achieving MDG targets. Present study aims to divulge the existing maternal health care service(MHC) utilization scenario in post Janani SurakashaYojna (JSY) period and assess its socio economic and
demographic factors, to propel the recent gains in MHC by focusing on poor indicators of maternal health in the EAG states.

**Aims/Objectives:**
The study mulls over the level and differentials in utilization of MHC services among rural women in EAG state; examines the relationship among its components and evaluates the impact of JSY.

**Material & Methods:**
Using District Level Household Survey (DLHS-3, 2007-08) data, analysis have been carried on 99898 currently married rural women aged 15-49 years whose last pregnancy resulted into live births. Cross tabulations and logistic regression analysis have been employed to understand the unadjusted and adjusted effects of pertinent socio-economic factors on MHC services utilization.

**Results:**
Except Odisha, findings highlight, poor performance of EAG states in full ante natal care, safe delivery and post natal care services utilization. Uttar Pradesh and Bihar are the poorest performers among EAG states. It illustrate the pronounce effect of socio demographic factors especially maternal age, mother’s education and wealth quintile in the utilization of these services. Muslim women and women belonged to Schedule caste and tribe are less likely to avail health care services. Sadistically, consumption of adequate IFA tablets/Syrup has registered declining trend over the survey period. However on the positive side, findings suggest that EAG states have gained momentum in MHC utilization in post JSY period.

**Conclusion:**
Effective health service delivery clubbed with behavioural change intervention and effective implementation of JSY are prerequisite to combat poor indicators of MHC services in EAG states.

**Socio-Economic Inequality in Utilization of Delivery Care in Rural India: Trends Analysis During 1992-2006**
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**Keywords:** Delivery Care; Inequality; Decomposition; India.

**ABSTRACT**
Despite the several efforts of improving the utilization of maternal and child healthcare (MCH) services, rural population remained vulnerable in India. Despite the fact the issue is under researched in India. Additionally, no study assessed the trends in socio-economic inequality in utilization MCH services in rural India over time.

**Aims/Objectives:**
To examine the trends in socio-economic inequality in safe delivery in rural India using nationally representative data.

**Material & Methods:**
This study used data from the multi-round of the National Family Health Survey conducted during 1992-2006. Descriptive statistics and multivariate analysis are used to understand the differentials and determinant of utilization of delivery care in rural India. Decomposition analysis is used to quantify the contribution of selected predictors in explaining the inequality in the outcome variable.

**Results & Discussion:**
While the overall coverage of delivery care in rural Indian women increased over the 1992–2006 period, but the coverage is very low (40%) in the country. Moreover, social disparities in the coverage over these 14 years either widened or stayed the same. The absolute rates of coverage increased across all the socio-economic groups. The disparities by household wealth were greater than the disparities by maternal education. The result of the decomposition analysis shows that contribution of household wealth and maternal wealth is greater. Moreover, the contribution of maternal education is decreasing and household wealth is increasing over the periods.

**Conclusion:**
There was a steady increase in the coverage of delivery care in rural India during 1992–2006, while the increase in the coverage was greater between 1992 and 1998 than between 1998 and 2006. Social disparities in coverage of delivery care in rural India either widened or stayed the same during the periods. The lower coverage of delivery care in rural areas and the persistent social disparities need to be addressed in an urgent and comprehensive manner.

**Antenatal Care Service Utilization by Pregnant Women in Rural Areas of Ujjain District in Madhya Pradesh.**

**Keywords** Antenatal Care, Utilization Of Antenatal Care

**ABSTRACT**
The World Health Organization estimates that approximately 1,000 women globally die every day due to complications...
from pregnancy or delivery. According to a new report, released by the WHO, 358,000 maternal deaths occurred worldwide in 2008, developing countries continued to account for 99% (355 000) of the deaths. Sub-Saharan Africa and South Asia accounted for 87% (313 000) of global maternal deaths. Antenatal care (ANC) service utilization among pregnant women is one of the important factors in reducing maternal morbidity and mortality.

**Aims/Objectives:**
(1) To find out the Antenatal care service utilization rate by antenatal females.
(2) To find out the factors affecting Antenatal care service utilization.

**Material & Methods:**

**Study Design** - Cross-sectional study

**Study Area** - GHATIA and TARANA blocks of Ujjain district.

**Study Period** - 1st July 2012 - 31 Oct 2012

**Sample Size & Sampling** - 210 mothers will be selected by using Thirty cluster sampling.

**Methodology:**
A Cross-sectional study will be conducted in two randomly selected blocks, Ghatia and Tarana blocks, out of the seven blocks of Ujjain district. Thirty clusters in these two blocks were identified according to Probability Proportional to Size. Seven mothers who had delivered with in last 1 year will be selected randomly in each cluster. A total of 210 mothers will be identified and included in the study with their consent. Information from all the mothers will be collected by using a predesigned, pretested proforma containing relevant information about the ANC services utilization like ANC visits, receiving TT injections, Iron and folic acid and Institutional deliveries along with the socio-demographic data.

**Results & Discussion:**
Data will be analyzed using SPSS 17.0 with keeping in view the aims and objective of study.

**Conclusion:**
Conclusions of the study will be provided after data analysis with keeping in view the aims and objective of study.

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**ABSTRACT**

Reproductive Health Awareness and utilization is a holistic approach to reproductive health and one of the key factors enabling women to be conscious of their rights and health status in order to seek and use appropriate health services.

**Aims/Objectives:**
This paper attempts to explore the factors affecting women’s awareness to various reproductive and child health programmes and again to find out the pattern of utilization of reproductive health services across different regions of Uttar Pradesh.

**Material & Methods:**
The basic data used in this study have been taken from the most recent round of national representative District Level Household Survey (DLHS-3) conducted in 2007-2008. The analysis is based on information collected from ever married women (EMW) aged 15-49, who are aware about above running government health programs (for 1st objective) and Currently married women (CMW) in 15-44 age groups are the respondent who receives reproductive health services (for 2nd objective). Bivariate, multivariate techniques and logistic regression with 3 sets of models have been used for proposed study.

**Results & Discussion:**
The findings reveal that awareness about immunization and family planning is almost universal in all regions. Friends and relatives are main source of information about spreading awareness about ANC, institutional delivery and family planning whereas role of health professionals and electronic media comes at second and third position. Health professionals are most important source of media while spreading awareness about Immunization followed by print media. Only 3.3% full ANC have been received by CMW in Uttar Pradesh but it is comparatively low in western region. Adjusted effect depicts that women's educational attainment has a strong significant effect in utilization of full ANC. Only one fourth of the currently married women received institutional delivery (25%) and it is highest in southern region (29%) of Uttar Pradesh.

**Conclusion:**
Concerted efforts are required to ensure sustained use of these services.

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**A Study on Health Seeking Behavior of Parents Towards Their Children in Rural Field Practice Area of A Medical College in A.P**
The attitude of parents towards their children’s health and illness is an important factor with regards to child’s overall development. In most developing countries, the health of the children is strongly dependant on parental healthcare behavior. This current study mainly looks into the attitude and health seeking behavior of parents residing in rural field practice area of a medical college.

Objectives:
To assess the awareness of the parents regarding the common diseases occurring in children. To look into the attitude and health seeking behavior of parents towards their child’s health.

Methodology:
• Study design: community based cross sectional study
• Study setting: rural area field practice area of a medical college in Andhra Pradesh.
• Study population: 200 families with children aged between 0 to 14 years
• Study period: August 2012 – November 2012
• Sample size: 200 families in rural areas
• Sampling technique: purposive sampling
• Data collection: House to house survey using pretested semi structured interview schedules
• Data analysis: represented as percentages using spss version 16.0.
• Verbal consent sought before their involvement in the study. Use of numbers on the questionnaires instead of names ensured confidentiality

Results: will be discussed in the conference

An Exploration into Childhood Diarrhoea, its Knowledge, Household Management and Treatment Seeking behaviour in Rural India: Insights from DLHS-3
Mayank Prakash, International Institute for Population Sciences

ABSTRACT
Globally Diarrhoea is the second leading cause of death among children under five and India too is not an exception to it. At least 257,000 children die from diarrhoea in India and it accounts for highest number of deaths due to diarrhea among South Asian countries. If Millennium Development Goal (iv) to reduce child mortality is to be achieved, diarrheal deaths are to be prevented. Very few studies have tried to explore the household management and treatment seeking behaviour related to diarrhoea in rural areas.

Aims/Objectives:
Present study attempts to explore level and determinants of childhood diarrhoea in rural India and subsequently mulls over its knowledge, household management and treatment seeking behaviour in rural India

Material & Methods:
Analysis for the present study have been conducted on a sample of 2,68,533 last live born children five years prior to the survey, drawn from District Level household Survey-3 (2007-08). Cross tabulations and logistic regression analysis have been employed to understand the unadjusted and adjusted effects of pertinent determinants and household management of diarrhoea.

Results & Discussion:
Around 12 children suffered from diarrhoea prior to two weeks of survey. Availability of water and sanitation, separate kitchen in household, water treatment, measles immunization, age of the child, religion, mother’s age, and wealth quintile emerged as significant determinants of diarrhoea. Higher prevalence of diarrhoea was found in the northern and western regions of the country. Although two third mothers had adequate knowledge about diarrhoea management only 44% gave ORS to children during diarrhoea and relied on household remedy. 70% women sought advice for its treatment and majority of were treated in private health facility. Only 29% sought treatment in government facility.

Conclusion:
At supply side government needs to prioritize providing drinking water and sanitation to rural India. It also needs to strengthen its health facility and promoting use of ORS.
**Enhanced Cultural Awareness of Student and Experienced Nurses Through Exposure to Health Care Systems in a Developing Country**

Professor Mark Jones, Professor Phillip Della, Professor Pauline Mella Jones, Michael, Della: Curtin University Perth; Mella: Hubert Kairuki Memorial University Dar Es Salaam Centre for International Health School of Nursing and Midwifery Curtin University, GPO Box U1987, Perth Western Australia, 6845

**Keywords:** Cultural Competence, Rural, Career Choice

**ABSTRACT**

This paper presents findings from a research project that aimed to evaluate cultural competence amongst a cohort of preregistration nursing students from Schools of Nursing and Midwifery at the five Universities of Western Australia (WA). The universities form the foundation partners of the Global Health Alliance in the Department of Health WA, which through a successful partnership with Hubert Kairuki Memorial University in Tanzania, Africa, provides students opportunity to be involved in clinical practice programs within the Tanzanian culture.

**Aims/Objectives:**

The aspects of the experience examined include the students’ perceptions of culture and nursing in Tanzania, including their reflections on personal and professional growth.

**Material & Methods:**

A mixed research methodology was used to address the aim of the project. This included the Campinha Bacote (2007) Inventory for Assessing the Process of Cultural Competency SV (IAPCCSV), a Demographic Questionnaire, Group Semistructure Interviews and Reflective Journaling.

**Results & Discussion:**

While the journey is in its infancy, sharing the lessons already learnt is invaluable. Recognition of individual partner’s needs in the areas of regulation, education and practice is paramount to build international sustainable healthcare infrastructures.

**Conclusion:**

We believe the exposure the student group had to a radically different culture from their own has the potential to change their perception and influence career choice with respect to working in Australian rural and remote communities and potentially as future volunteers in developing countries.

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**Intervention to Facilitate Integration of Traditional Health Practices in South African Medical Care: A 3 Year Comparative Pre-and Post-Test Study**

Dr Marykutty Mammen. Walter Sisulu University, Faculty of Health Sciences, South Africa

**Keywords:** Intervention, Traditional Medicine, Attitude, Practice, Medical Students, South Africa

**ABSTRACT**

It is common knowledge that most Africans grow up with treatments with traditional medicine (TM) and experiences of interactions with traditional healers (TH). Consequently, TM and TH are part of the African culture.

**Aims/Objectives:**

The objective of the study was to gauge the effect of interventions in order to increase medical students’ awareness, knowledge and attitudes towards practices on Traditional Medicine (TM).

**Material & Methods:**

This was a longitudinal study conducted at Walter Sisulu University among first year edical students. Pre-tests were administered in February each year in 2010, 2011 and 2012. These were followed up with post-tests in June in the respective years after exposure to four interventions: (1) gathering information from their family on medicinal plants that are used to treat different illnesses; (2) collecting one medicinal plant and information about its use from their locality; (3) presentations and discussions with traditional healers about the role of traditional health care in the community; and (4) visiting a traditional healer’s practice. Data were gathered through structured and standardized questionnaires in order to obtain sociodemographic factors, beliefs and attitudes. Paired chi-squared test was used to measure changes in beliefs, attitudes and practices of students between pre-test and post-test.

**Results & Discussion:**

In 2010, out of the 98 students surveyed, 39%, 59% and 82%, were males, females and blacks, respectively; in 2011, out of the 108 students surveyed, 49%, 51% and 88%, were males, females and blacks, respectively; and in 2012, out of the 118 students surveyed, 42%, 58% and 89%, were males, females and blacks, respectively. Although in 2010, only 45% had beliefs in TM, in both 2011 and 2012, 57% had beliefs in TM. However, in 2010 and 2012, 51% and 53% had positive attitudes towards TM, respectively, in 2011, only 42% had positive attitudes. After interventions, and despite the lack of change in belief in TM, there was a significant increase of positive attitude in 2010, 2011 and 2012, i.e. +78%
change; p<0.0001, +108% change p<0.0001, +50% change p<0.001, respectively.

Conclusion:
In conclusion, short educational interventions can positively influence students’ attitude and practices towards TM.

Understanding Community Perceptions of Health and Social Needs in Five Rural Villages in Gujarat State, India: Results, Experiences and Recommendations From A Rapid Participatory Appraisal
Clancy Read1, Jaya Earnest, Mohammed Ali, Dr Veena Poonacha 2, Suman Bali 2
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2. Center for Rural Development Research Center for Women's Studies, SNDT Women's University, Sir Vithaldas Vidyavihar, Juhu Campus, Juhu Road, Mumbai, India
Keywords: Rapid Participatory Appraisal, Rural Health needs assessment
ABSTRACT
Rapid Participatory Appraisal (RPA) focuses on knowledge for action rather than generating knowledge for understanding. RPA is an appropriate method for assessing the health status of marginalized and vulnerable communities as it provides insights into a community's own perspective of its priority needs. Based on the knowledge and perceptions of local communities, an effective RPA is the first step in formulating an action plan that involves communities in choices about their own health improvement. The process and result of collecting this information strengthens primary health care principles of equity, participation and multi-sectoral cooperation.

Aims/Objectives:
This paper reports on a qualitative study that utilised RPA to assess the community health needs in five rural, tribal villages in Pardi Taluka, Valsad District, in Gujarat.

Material & Methods:
Annette and Rifkin’s information pyramid was used as a framework, to collect data from each village over a period of five weeks in 2009, using multiple qualitative methods of semi structured interviews with key informants drawn from the local community, direct observations through community visits, focus group discussion and review of existing documents. In total, 82 community members were interviewed during the RPA process.

Results & Discussion:
The results of the RPA highlighted a range of priority health problems identified by the communities. Alcohol abuse was endemic amongst all study villages. Sanitation issues were also significant with 50% of homes in some villages being without sanitation facilities. Further issues of concern for community members were environmental pollution, access to and quality of health care, road traffic safety, and underlying poverty. Identifying these needs however does not guarantee that subsequent action will result in overcoming the priority health issues due to inherent contextual and social factors.

Conclusion:
The results document that RPA represents an effective approach for identifying and prioritising community health concerns of marginalised members of tribal communities in Pardi Taluka. The study proposes a replicable participatory model of health needs assessment in rural populations with practical considerations and modifications to the RPA approach.

Disparity in Professional & Personal Attitudes of Anganwadi Workers Toward Persons with Disabilities in Rural Community
Dr. Anupama Khanna, Dr. Neeraj Mishra, G.B.Pant Hospital, Jawaharlal Nehru Marg, New Delhi - 110002
Keywords: Attitude, Anganwadi Workers, People with Disabilities
ABSTRACT
India is a country suffering from overpopulation, malnourishment, poverty, impairments and disabilities, and to counter these health and mortality issues gripping the country there is a need for a high number of medical and healthcare experts. Due to unfortunate shortage of skilled professionals, the country is trying to meet its goal of enhanced health facilities through anganwadi systems by using local population, which in many ways are better equipped in reaching out to the rural population. They play an influential role in determining the priorities and direction of rehabilitation services in rural community. The quality of rehabilitation services is influenced by the attitudes of anganwadi workers (AWW) toward persons with disabilities (PWD), as a rehabilitation worker’s attitude is a powerful determinant of a patient’s response to treatment. Unfortunately, the literature is highly inconsistent with regard to nature and relevance of attitudes demonstrated by AWW.

Aims/Objectives:
To examine the professional and personal attitudes of Aanganwadi workers and its impact toward persons with disabilities, given their designation, age and past experience.
Material & Methods:
Form-A of The Attitude Toward Disabled Persons (ATDP-A) Scale was used to discover whether AWW distinguish between personal and professional attitudes towards PWDs. 50 AWW completed two copies of ATDP-A scale, one for each type of attitude. Hypothesis was tested using a two-tailed t-test.

Results & Discussion:
Results are discussed in terms of inconsistencies in research literature and implications for AWW training programs.

Conclusion:
Mean professional ATDP-A score did differ from Mean personal ATDP-A score. The study found that professional attitudes of AWW were more positive than their personal attitudes towards PWD. It appears that senior AWW, and those with more experience can better divorce professional from personal attitudes.

Challenges for Health in the Global Village; A Case Study of the Rural Healthcare Delivery System in Northern India

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Key words: CRCT, Spatial Research, GIS, GPS

ABSTRACT
Health condition of people living in rural parts of India where majority of the population reside is dismal. People have high morbidity, poor healthcare availability besides less financial means to approach the qualified healthcare services located at the distant places. This paper attempts to present the existing rural healthcare delivery system in northern India utilising the datasets captured from three Cluster Randomised Control Trials (CRCTs) under ECFP7 CBHI project.

Aims / Objectives:
This research paper attempts to study
• the components of rural healthcare delivery system in northern India and how the existing healthcare delivery system is responding to the healthcare needs of the community?
• the prevalent treatment pathways among the target group and the factors influencing choice of providers.

Material & Methods:
Healthcare supply configuration and physical accessibility in the study area had been captured using spatial research methodology. GPS mapping of Rasulabad (district Kanpur dehat, Uttar Pradesh), Shigavgarh (district Pratapgarh, Uttar Pradesh) and Mahua (district Vauishali, Bihar) blocks had captured the 3092 providers from 14 different i.e. government (Sub Centre, PHC, CHC, District hospital), private (clinic, hospital, pathology centre, imaging centre), charitable (hospital, clinic), pharmacy, local practitioners and others (birth attendant, religious healers and grocery shops selling medicines). GIS based analysis on the spatial and non spatial datasets relating to the target community, providers and physical accessibility helped in conducting indepth study on the location allocation, treatment pathways and factors affecting the choice of provider.

Results/Discussion:
Study revealed acute shortage of qualified providers and abundance of unqualified providers. Government facilities were found to be irrationally located and were overburdened in terms of population catchment. There is a scarcity of qualified private hospitals/ nursing homes. These healthcare supply gaps had been filled by the locally evolved system of private unqualified practitioners.

Conclusion:
The paper provides robust emperical evidences on the existing healthcare system in the study area.

Perceptions Regarding Compulsion of Rural Service for the Medicos

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Keywords: Rural Health, Rural Service, Medicos and Policy

ABSTRACT
One in ten doctors work in rural areas where most of the Indians reside. The Indian Government is planning to implement a policy of one year rural service compulsory for medical students.

Aims/Objectives:
This study aims to explore the medical student’s problems and their attitude towards the Government’s policy of implementing one year compulsory rural service, relation with the medical student’s background and comparison of the perceptions of male and female medical students regarding the policy.

Material & Methods:
Cross sectional study was done which included 5 medical colleges of Mangalore, Karnataka, India. 320 Interns/Final year MBBS students who were selected through stratified random sampling method were included in the study. A
questionnaire was prepared based on which the targeted information was sought in a systematic manner. Data was analysed using SPSS version 11.5. All the students enrolled in the survey said that this policy will benefit the rural population.

**Results & Discussion:**
The study showed that the female students are more interested in rural service than their male counterparts (p<0.001). Interestingly the students background (rural or urban) did not have any association with the willingness to undertake the rural service (p=0.29). It was found that medicos fear that rural postings distance them from their friends, families, professional colleagues and teachers, lead to physical and social isolation, lack of adequate staff and equipment and lower their professional standing. Unsatisfactory working conditions and primitive living conditions add to their woes.

**Conclusion:**
This study demonstrates the value of rural placement as a method for increasing students’ intentionality to take up rural practice as a positive and viable career option. So we feel if the policy is implemented by providing needs to the medical students it is going to benefit the rural population and will be one of the successful policies.

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**The Effect of Back pack on Cervical and Shoulder Posture in Male Students of Loni**
Deepali Nivrutti Hande, Neesha Shinde, Dr.S.M.Khatri, College of physiotherapy, Pravara Institute of Medical Sciences, Loni, Maharashtra, India - 413 736.

**Keywords:** Backpacks, Craniohorizontal angle, Craniovertebral angle, and Sagittal shoulder posture.

**ABSTRACT**
Today in this competitive world students from very young age have to learn numerous subjects and carry heavy schoolbags. Schoolbags alter the student’s unloaded posture and reposition it into a more strained and stressed improper, potentially unbalanced posture, with the addition of external force. Young children are suffering from back pain much earlier than previous generations, and the use of overweight backpacks is a contributing factor.

**Aims and Objectives:**
To determine change in cervical and shoulder posture while carrying backpack and also to compare the same without backpack and to find out percentage of body weight that student’s were carrying to school in the form of backpacks.

**Methods:**
100 boys aged 11 to 14 years were randomly selected from 2 schools. Cervical and shoulder posture were assessed in terms of Craniohorizontal angle (CHA), Craniovertebral angle (CVA), and Sagittal shoulder posture (SSP) with backpack and without backpacks. Posture was assessed by sagittal plane photographs with help of AutoCAD software 2004.

**Study design:** Cross – sectional study.

**Results:**
Results showed significant difference in CHA, CVA, SSP with backpack and without backpack. Students showed forward head posture and kyphosis while carrying their own backpack. Most of the students were carrying more than 15% of their body weight in the form of backpack.

**Conclusion:**
Cervical and shoulder posture were significantly alter while carrying backpack when compare the same without backpack. This study shows evidence about the actual deleterious change in posture that our children are facing due to carriage of backpacks and hence it is essential to educate about health issue to teachers, parents and children themselfs.

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**Self Medication Use in Pune, Maharashtra, India**
Dr. Yogendra Keche, Dr. Radha Yegnarayaran1, Neha Loharkar2, Mukesh Dharma2, Avanti Bhosale2, Shreya Chugh2, Apoorva Makan2, Sumedha Rawal2, Associate Professor, Professor and Head1, Department of Pharmacology, II MBBS students2, Smt Kashibai Navale Medical College and General Hospital, Narhe Ambegaon, Pune – 411041

**Keywords:** ADRs to self medication, Antibiotic self medication, NSAIDs self medication

**ABSTRACT**
Aims/Objectives: To analyze the self medication use and to assesses the rationality of self medication use in Pune city.

**Material & Methods:**
With the help of semi-structured questionnaire, data was collected by II MBBS students for this study. Information about the name of the self medication, diagnosis for the use of self medication, source of information for self medication use and adverse effects reported to self medications was collected.

**Results & Discussion:**
Analgesics (28.68%), antibiotics (13.18%), vitamins (10.85%) and GIT ailment drugs (14.34) are most commonly used as self medication Pune. Apart from this, herbal drugs and skin problem drugs are predominantly self medicated in Pune. Information about the self medication was predominantly obtained from previous prescription of doctors (62.41%) and from chemists (18.99%). Advertisement (9.69%) was 3rd important source of information for self medication use in Pune.
Antibiotics self medication use was associated 29.41 % ADRs. The adverse effects reported with antibiotic self medications were: vomiting, hyperacidity, diarrhea, headache, confusion. Self medication of antibiotics was taken for less duration of time (average time in this study was less than 3 days.) and in inappropriate doses. 27.03 % adverse effects reported with NSAIDs self medication use.

**Conclusion:**

NSAIDs and GIT drugs are commonly self medicated in Pune irrespective of socio-economic / education status. Skin problem and herbal drugs are commonly self medicated in Pune. Self medication of antibiotics is disturbing, as these are liable for drug resistance and ADRs and hence should be taken under supervision only. Strict FDA regulations for dispensing of certain drugs without prescription of RMP may help in decreasing hazards of self medications. Regulation of advertisements may also help in curbing the self medication in urban areas.

**Comparative Evaluation of Effectiveness of Health Hazard Warning Signs on Tobacco Products Among Rural Population: A Prospective Survey.**

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**Key words:** Tobacco, health hazard warning signs, rural population, tobacco products.

**ABSTRACT**

Many countries have adapted the use of warning signs on tobacco products as major preventive tool for tobacco consumption. In spite of this there is no remarkable decrease in tobacco consumption especially in rural area and this shows that we need to think better and bigger.

**Aim:**

Aim of the study was to evaluate effectiveness of health hazard warning signs on tobacco products among rural population. Objectives of the study were to evaluate awareness of health hazard warning signs on tobacco products in relation to age, gender, education, type of tobacco (self made or commercially available) and form of tobacco (smoking and smokeless form) consumption.

**Methodology:**

3000 randomly selected subjects from rural area were included in the survey. A predesigned questionnaire form was given to each subject and asked to answer the questions. The total point score of awareness was calculated for each subject. The collected data was statistically analyzed by applying Kruskal Wallis and Mann Whitney u test.

**Results:**

Females are very less aware about these health hazard warning signs. As usually educated people are more aware about these warning signs. In relation to age, individuals above 30 years of age were having less knowledge about health hazard warning signs. Self made tobacco product users are totally unaware about any health hazard warning signs on tobacco products. Interestingly the forms of tobacco product that is smoking and smokeless form does not have any influence over awareness about the health hazard warning signs.

**Conclusion:**

Effectiveness of health hazard warning signs is limited and it is not reaching to particular section of rural society like females, uneducated, individuals above thirty years of age and to those who are consuming self made tobacco products. The major challenge is the use of self made tobacco products where there is no question of any signs on any tobacco products.

**Reasons for Incomplete Immunization: A Cross Sectional Study at Urban Health Centre of Government Medical College, Aurangabad**

Abhijeet Ingale1, Dixit J.V1, Kiran Shinde2, Mahavir Nakel2, Deven Deshpande2.

**ABSTRACT**

Primary immunization in India is carried out to protect all children against six vaccine preventable diseases, still many children doesn’t receive vaccination at proper age and if receive there is irregularity.

**Objective:**

To find out the reasons for incomplete primary immunization under 5 year children.

**Study Design:** cross sectional study.

**Study Area:** field practice area of urban health training centre GMC Aurangabad.

**Study period:** One month.

**Material and Method:**

An immunisation survey for finding out reasons behind incomplete immunisation was carried out house to house by a group of intern doctors at field practice area of Urban Health Centre, Shahaganj of Government Medical College and Hospital, Aurangabad.
**Results:**
62% children had received complete immunization till required for their age at proper time. While 38% children were irregularly vaccinated. Reasons behind irregularity was 60% children had obstacles 35% had lack of motivation 5% lack of information. Reasons for lack of motivation 82.60% were ignorance while 17.40% were false beliefs. While reasons behind Obstacles was 74.35% ill health 17.95 % out of station, 7.70 % dose not available. Present study speaks about current immunization status of children and the reasons for lack of immunization; it not only gives recommendation and suggestions but also sends a positive message for vaccination in the society.

**HPV Vaccine-Knowledge, Awareness and Felt Need in Female Students of R.D.GMC Ujjain, M.P.**
Patidar Shivnarayan, Patidar S.N., Dr. Mishra B.N., Dr.(Brig.) Mehta S.C.
Department of community medicine, R D Gardi Medical College Ujjain {MP}

**ABSTRACT**
HPV contracted during sexually active life and can lead to cancer cervix. Cervical cancer is commonest cancer in Indian women account for more than ¼ of world death due to cervical cancer. It is second most in world among women. The main aim of HPV vaccination is to prevent women from becoming infected and consequently to prevent cancer cervix. Vaccine alone can prevent about 70% cervical cancer and 90% of pre-cancers lesion.

**Aim and Objective:**
1) To study knowledge and awareness of HPV vaccine in female students.
2) To study the HPV vaccine coverage among study participants.
3) To study the reasons for not receiving vaccine in the study participants.
4) To study the felt need of vaccination against HPV in these females.

**Methodology:**
Predesigned questionnaire will be filled by female students of R.D.GMC.
Study Period: june-july2012
Study Place: R D Gardi Medical College Ujjain {MP}
Study Population: female students of RDGMC, Ujjain.

**Method:**
Questionnaire will be given to study subjects to collect their demographic data including level of education and knowledge about risk of HPV, any prior history of exposure / disease contracted and vaccination received and if not the felt need of vaccination against HPV.

**Result:**
The analysis will be done using SPSS software with keeping in view the aim and objectives of the study.

**Basic Package of Oral Care- Feasibility in Rural India**
Dr.Ramya Shenoy, Reader, Dept.of Public Health Dentistry, MCODS,Mangalore, Ramnath Kripa,Central Ware House Road, Mannagudda, Mangalore, Karnataka,575003

**Key Words:** Basic Package of Oral Care, Rural, Feasibility

**ABSTRACT**
Oral health remains a luxury for most of the world population including India. This is especially true for the disadvantaged population. This makes oral health problem a global concern. In 1994, WHO introduced Basic Package of Oral Care (BPOC), which represents a fusion of concepts and approaches that has developed over the last decade. The essential component of BPOC are Oral Urgent Treatment, Affordable Toothpaste and Atraumatic Restorative Treatment. This package has been tried in developing countries and showed decreased prevalence in dental diseases. The present poster reviews the health care delivery system in rural India and feasibility of introducing the BPOC in rural sector.

**Seroprevalence of Transfusion Transmitted Infections Among Healthy Blood Donors at Blood Bank attached to a Tertiary Care Hospital.**
Umesh S Joge, P R Bhatkule, Vilas R Malkar, Assistant Professor, Department of PSM, Government Medical College, Akola

**Keywords:** Blood donor, Transfusion transmitted infection, Human immunodeficiency virus, Hepatitis B virus

**ABSTRACT**
It is well known that blood transfusion is associated with a large number of complications, some are only trivial and others are potentially life threatening, demanding for meticulous pretransfusion testing and screening. More than 18 million units of blood are not screened for transfusion transmissible infections (TTIs). With every unit of blood, there is a 1% chance of transfusion associated problems including transfusion transmitted diseases.

**Objectives:**
To find out the seroprevalence of TTIs (HIV, HBV, HCV, Syphilis and Malaria) among healthy blood donors.

**Methods:**
The study was conducted at the blood bank of a tertiary care hospital. A retrospective review of blood donors’ records over a period of seven years (2005-2011) was done. Sterile venous anticoagulated blood was collected from each of the donor and analyzed for HIV, HBV HCV, Syphilis and Malaria using highly sensitive and specific kits.

**Results & Discussion:**
A total of 29,916 apparently healthy donors were screened during the period of 7 years. The overall prevalence of HIV, HBsAg, HCV and syphilis among the blood donors were 0.53%, 1.60%, 0.14% and 0.03%, respectively. No blood donor tested showed positivity for malarial parasite.

**Conclusion:**
The present study clearly documents a relatively low seroprevalence of major TTIs among blood donors. With the implementation of strict donor selection criteria, use of sensitive screening tests and establishment of strict guidelines for blood transfusion it may be possible to reduce the incidence of TTI in the Indian scenario.

**Awareness and Practices of Biomedical Waste Management among Nursing Staff of a Hospital Attached to a Teaching Institute**
Mohan M. Raut, P. R. Bhatkula, Vilas R. Malkar, Assistant Professor, Department of PSM, Government Medical College, Akola, Government Medical College, Akola, Maharashtra

**Keyword:** Biomedical waste, Nursing Staff, Awareness, Practices

**ABSTRACT**
The waste produced in the course of healthcare activities carries a higher potential for infection and injury than any other type of waste. Inadequate and inappropriate knowledge of handling of healthcare waste may have serious health consequences and a significant impact on the environment as well.

**Objectives:**
1. To Study the awareness and practices about BMW management among nursing Staff
2. To assess the use of personal protective measures against biomedical waste.

**Methodology:**
A hospital based cross-sectional study conducte among 152 nursing staff. Information regarding awareness and practices of BMW management such as of BMW rules, biohazard symbol, colour coded containers and use of personal protective devices was collected. The actual practice of handling BMW in wards was observed during the morning hours of OPSs.

**Results & Discussion:**
In the present study knowledge about BMW management rules was found in 131 (86.18%) study subjects while about 135 (88.81%) were aware about biohazard symbol printed on bags. About 124 (81.57%) nursing staff were aware about risk of transmission of various diseases including HIV/Hepatitis B and injuries due to hospital waste.
Knowledge of color code of containers for segregation of BMW in study subjects was good. Most of the study subjects gave a correct answer for Human anatomical waste 137 (90.13%), cotton or bandages soiled with blood, pus 122 (80.26%).

**Conclusion:**
Continuous monitoring and evaluation of BMW management is necessary to ensure that policies and procedures are followed. Even a small proportion of badly managed waste can potentially be dangerous.

**Qualitative Study of village Health, Nutrition and Sanitation Committee Regarding their Roles and Responsibilities in Health Management in Selected Villages of 5 Subcentres Area of PHC, Anji in Wardha.**
Dr.Pramod Kumar Sah, Dr. Avishek V. Rout, Dr. B.S.Garg, Dept. of Community Medicine, MGIMS, Sevagram, Wardha, Maharashtra-442102

**Keywords** VHNSC, UNTIED FUND, VHP

**ABSTRACT**
National Rural Health Mission seeks to provide accessible, affordable and quality health care to the rural population, especially the vulnerable sections. In the process, the responsibility of preparing village health plans, its implementation and monitoring has been entrusted to the Village Health Nutrition and Sanitation Committee of the Gram Panchayat.

**Aims/Objectives:**
1. To study the current role of VHNSC in health care delivery at village level
2. To understand the process within VHNSC during preparation of village health plan, conduct of a meeting, decision-making, resource management and conflict resolution.
Material & Methods:
Study area: The study was carried out in the selected villages under field practice area of Rural Health Training Centre wardha.
Study duration: Jan-Feb 2012
Study design: Qualitative Study Design using focus group discussion and indepth interview.
In each selected village meeting of VHNSC members were arranged and Focus Group Discussion with the VHNSC members was carried out. Analysis of the variables: Quantitative data was using EPI INFO and Qualitative data was analyzed manually.

Results & Discussion:
Results: Mean age of the VHNSC members are 38.5, with 62% members being female. Majority of the members are OBC (52%). Results of in- depth interview & FGD
Awareness: Only few of the VHNSC members knew about objective of VHNSC.
VHNSC meeting: In Majority of the VHNSCs, some members did not attend meeting because of lack of interest.
Role and Responsibility: Regarding functions of VHNSC majority of the VHNSC members did not know about the role of VHNSC.
Village health plan (VHP): None of the VHNSC members knew about village health plan except for ANMs.
Unified fund: Majority of the VHNSC members were unaware about the areas where the funds could be utilized.
Conclusion: There is obvious need of training and continuous monitoring of VHNSC for achieving the objectives of setting of VHNSC in each village.

A Survey on Awareness Among Community Health Workers And Anganwadi Workers About Physiotherapy Services in Ahmednagar District
Dr. Mahendra Shende, M.P.Th. (Neurosciences), Senior Lecturer, College of Physiotherapy, PIMS, Loni
Key words: Community based Rehabilitation, Health worker, Awareness

ABSTRACT
India is a vast country with a population of over 1 billion with diverse socio cultural geographical features, where 34.7% of the people live on an income of less than 1 USD (Approx. INR. 50/-) a day and 75% of persons with disabilities live in rural areas. Thus the need of CBR programs is much relevant in a fast developing country like India. Many low-income families live in area where health resources are limited. There is an unemployment rate among persons with disabilities of 80% to 90% among people of working age in developing countries, and 50% to 70% in industrialized nations. Educational rights and healthcare rights are routinely denied in these nations, and 90% of the children with disabilities in developing nations do not attend school, according to UNESCO. CBR needs to be more pronounced in India due to the common community-level barriers that include:
• Shortages of health professionals in low income or rural communities.
• Inadequate safety net resources (such as community clinics providing primary care).
• Insufficient access to emsundaram K.V.player-provided or otherwise affordable health insurance coverage.
• Service fragmentation in community health and human service sectors. Health care service is described at 3 levels; viz, primary, secondary and tertiary levels.
Since the primary care level which is provided by the multipurpose health workers, village health guides and trained dais is closest to the people where most of the health problems are dealt with and resolved, emphasis should be made to strengthen the knowledge about physiotherapy and the skill of the health care people at the primary health care level. Community workers form the core of Community Based Rehabilitation (CBR) programme. CBR workers provide information to people with disabilities and their families. The community CBR worker also acts as an advocate for people with disabilities by making contacts with schools, training centers, work places and other organizations to promote accessibility and inclusion. India’s rural health system places primary emphasis on maternal and child health in the village. One village woman is employed as an Accredited Social Health Activist (ASHA) focused on maternal health, and another as an Anganwadi Worker (AWW) focused on infant health. The ASHA program has great potential to improve key maternal health indicators, yet ASHA performance is lacking in many dimensions even relative to the modest goals of the program. Awareness about physiotherapy among the primary health care workers will help in early identification of physical impairments and thus ensure efficient intervention. This ought to reduce the burden of disability and the resulting unemployment in our country. So far no studies have been done in India to assess the awareness of Community Health Workers and Anganwadi workers about physiotherapy, to the best of our knowledge. Therefore this study aims at accessing the awareness of the Community health workers and Anganwadi workers about physiotherapy services. This is expected to help the less privileged disabled people in the society to attain the basic physiotherapy health needs and services.

Method of Collection of Data
The study was done in two phases. In the 1st phase, a detailed self-administered questionnaire which includes both closed and open ended questions was developed. The questionnaire contain basic questions about physiotherapy. Prepared questionnaire was sent for content analysis to the experts in the field. Based on the suggestions from the evaluators the final list of questions was formed. Bio-statistian was indulged in all the stages of the development of questionnaire. The questionnaire was translated into the local language of the people under study. In the 2nd phase, the researcher had seeked the permission for conducting the study in the urban and rural set-ups from the concerned officials. The official meeting place of the Community Health Workers and the Anganwadi workers in the five taluks will be personally visited by the Researcher and the questionnaire along with their consent form will be distributed among them, asking them to fill it within 10-15min. The researcher will present during the study in order to clarify any doubts regarding the questionnaire. Once all the questions are answered, the questionnaire will be collected on the spot. A small pamphlet containing the necessary information about physiotherapy health care was given to all the participants.

**Study Design:** Cross-sectional Survey

**Sample Size And Method:**
A sample of 100 Anganwadi workers and 100 health workers was selected for the study by convenient sampling technique.

**Criteria For Selection:**
**Inclusion Criteria:** Anganwadi workers, Community health workers in Ahmednagar District

**Result:** About 82 \% Community Health Workers and Anganwadi Workers were unaware about physiotherapy services and role of Physiotherapist, whereas 18\% of health workers were aware and knew about the physiotherapy services.

**Effectiveness of Semirigid Shoe Wedge on Patellofemoral Pain Syndrome in Workers of PIMS, Loni**

Kasturi Pawade, Deepali Hande, Dr. S.M. Khatri, College of physiotherapy, Pravara Institute of Medical Sciences, Loni, Tal: Rahata, Maharashtra, India - 413 736.

**Keywords:** Patellofemoral Pain Syndrome(PFPS), VAS, Q Aangle, MFIQ, semirigid shoe wedges, exercises.

**ABSTRACT**

**Aim &Objectives:** To find the effectiveness of semi rigid shoe wedges in treatment of patellofemoral pain syndrome (PFPS)

**Purpose:**
To examine the effectiveness of semi rigid shoe wedges as compared to the conventional physiotherapy for a period of 6 weeks

**Methods:**
10 workers reported the Community Physiotherapy Department, COPT, Loni with PFPS aged 25 to 45 years were randomly selected. Inclusion criteria: Workers with unilateral or bilateral knee pain, pain in prolong sitting, standing, kneeling, squatting & descending stairs, pronated feet, Q Angle >150 in female & 100 in male. Exclusion criteria:Pathology of other knee structure, history of knee surgery, any foot condition preclude the use of foot orthosis were grouped into Treatment Group (Group A) & Conventional Group(Group B). Group A was given exercises and semirigid shoe wedge was inserted in shoe. Group B was given exercises. Outcome measures: Pain on VAS, Q-Angle, Modified functional Index Questionnaire(MFIQ).

**Study design:** prospective comparative study.

**Results:**
Results showed significant difference in VAS, Q Angle, MFIQ in A and B group. Group Ashowed decrease in VAS, Q Angle & increase in MFIQ as compared to group B within 6 weeks of study

**Conclusion:**
VAS, Q Angle & MFIQ were significantly alter in group A when compared with group B in a period of 6 weeks.

**Quality Of Care and Client Satisfaction with Neonatal Care in Health Care Facilities in Ballabgarh Block, Faridabad District, Haryana.**

Pradip Kharya, Anand Krishnan, Sanjay K. Rai, All India Institute of Medical Sciences, New Delhi

**Keywords:** Neonate, Quality of Care, Client Satisfaction, India

**ABSTRACT**
India contributes to nearly one fifth of global neonatal deaths. One possible reason is inadequate neonatal services in rural health facilities and one indicator of such performance is client satisfaction. Few studies in India have documented client satisfaction for neonatal health services.

**Aims/Objectives:**
To study quality of neonatal related services and client satisfaction of caregivers of neonates either delivered or admitted in health facilities of Faridabad district, Haryana.
Material & Methods:
A list of health facilities where neonatal admissions/deliveries take place was obtained from district health officials and key informants. From admission records of these facilities home addresses of three to five neonates who were admitted in past one month were selected randomly for home visit. A semistructured pretested questionnaire was used to assess client satisfaction of caregiver present at the time of admission/delivery. Two different questionnaires were used for caregivers of delivered/healthy and sick neonates. To minimize recall bias interview was done within 1 month of selection. In case of absence of appropriate respondent, next participant was selected from buffer list prepared.

Results & Discussion:
Totally 38 health facilities (government and private) were identified. Of these 27 had only delivery facilities, 2 had only sick neonatal admission facilities and 9 had both. Of 158 neonates identified only 116 were contacted for interview. Of these 116, 90 were delivered/healthy and 26 were sick neonates. Among care-givers of healthy neonates only 68% received exclusive breast feeding advice, 58% neonates received “at birth vaccines” and 71% received cord care advice. Among care-givers of sick neonates, 69% received a specific review date. Among care-givers of all neonates 40% reported non-satisfaction with care given at facility, 46% reported waiting time for >15min, 90% received discharge card.

Conclusion:
Neonatal Services being provided in Ballabgarh Block need to be strengthened.

Cross Practice-Challenges and Way Ahead
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Key words: Cross practice, challenges, way ahead,

ABSTRACT
Cross practice has been a controversial issue not only in Maharashtra but also in India. In the past, honourable courts have passed many verdicts against doctors who had given medicines from other pathies about which they have not formally learnt in their syllabus. In general doctors from Ayurved and Homeopathy have been punished by the consumer forums and courts for such prescriptions. Health is being subject in the state list; state governments have passed ordinances and issued circulars allowing doctors from Ayurved and Homeopathy to use certain medicines from Allopathy. However such ordinances and circulars fail to protect the doctors of other pathies when the legal matters are referred to Hon Supreme Court. As a result there is lot of insecurity in these doctors and hence one needs an amicable solution. Also there is a larger issue of how to provide modern medicines to the public in absence of modern medicine doctors in the rural and remote areas.

Aims And Objective:
To understand the intricacies and effects on public health of the issue of cross practice and banning it.

Methodology:
It is a review article which takes into account all relevant information available on the issue of cross practice and the ground reality.

Discussion:
The study describes about the idealistic view and practical view related to cross practice in India. It tries to analyse the situation as it exists today in the field. The study proposes a solution of training of non-allopaths in some designated medicines of allopathy as a stop gap arrangement. The study also raises a broader issue of providing equitable patronage to other pathies.

The Body as an Educational Instrument - A Resource in Health Care
Kristina Kindblom, RPT, PhD, Karolinska Institutet, Alfred Nobels Allé 23 100, 114 83 Huddinge, Sweden

Keywords: Communication, Movement awareness, Tacit knowledge, Education

ABSTRACT
Summary of my doctoral thesis adresses education of providers, using the body as an educational instrument when assisting physical movement of patients. Providers own movement awareness and communication skills may be of importance to support a patient to mobilize remaining resources. In response to this Natural Mobility? has been developed as an educational model. Aim of the education is to create a learning environment where providers can train body and movement awareness and communication skills to be able to guide patients to move independently. The overall structure of the model is to make participants aware of their own tacit (bodily) knowledge. How they spontaneous move, what strength is needed when moving and what reflection it gives. To broaden awareness movements are compared with
movements in the opposite direction, so that participants can choose which one feels comfortable, uncomfortable, secure, insecure.

**Aims:**
Overall aim was to explore and evaluate providers’ changes after participation in Natural Mobility.

**Material & Methods:**
In total, 462 providers from nursing homes and hospitals in municipalities and county councils in Sweden were recruited voluntarily to four studies. The intervention consisted of a course in Natural Mobility. Outcome was measured with quantitative and qualitative methods.

**Results:**
About two thirds of the providers had changed something in their way of assisting patients after a year. Perceived strain and reported disorders decreased while providers movement awareness and verbal instructions to the patient increased. Reasons for changes seemed to be related to whether the provider focused the patient, their own body or the communication with the patient when assisting movements. Changes showed a broad variation but a limited number for each provider.

**Conclusion:**
The body as an educational instrument is inexpensive and can be a health promoting support for providers and patients in rural health care. More research is needed.

**Interventional Study to Assess Effectiveness of Modular Training on Knowledge And Perceptions About STI And HIV/AIDS Among Asha Workers of A PHC.**
Dr. Betsy Anthony Cherusserikaran, Dr. Sunita S. Shanbhag, Dr. R.R. Shinde, Seth G.S. Medical College & K.E.M. Hospital, Mumbai

**Keywords:** Grass Root, Peer Educators

**ABSTRACT**
ASHA workers are grass root level first contact community workers who can have powerful impact on health & welfare of people by providing an interface between community and health system. Their correct knowledge regarding STI and HIV/AIDS can influence their effectiveness as peer educators in community for promotion of STI/HIV services.

**Aims/Objectives:**
1. To assess the knowledge and perception about STI and HIV/AIDS among ASHA workers of a PHC.
2. To evaluate effectiveness of training on their knowledge and perception about the same after 8 weeks of the intervention.

**Material & Methods:**
It is a cross sectional interventional study conducted at PHC, Rural Health Training Centre, Khardi, Thane, Maharashtra from April to June 2012, of all ASHA workers (38) of PHC on STI/HIV/AIDS. All participants had undergone conventional training prior to induction. After a pre test, an interactive training session was conducted using the 7th ASHA training module and in addition, IEC materials (posters, flipcharts) in two sessions (small groups) on two consecutive days. A post test was conducted immediately and another post test at the end of 8 weeks.

**Results & Discussion:**
1. The pre score was not adequate in spite of undergoing prior conventional training at the time of induction. However, the post intervention retention score showed significant improvement.
2. The total score improved significantly from 73.21 to 94.97 (max. score 101) following the interactive training session, tested at the end of 8 weeks.

**Conclusion:**
Customized training based on training need assessment is the key for effective training of ASHA workers.

**Use of Audio-Visual Training in Local Language During Community Gatherings to Raise Awareness About Role of Community Based Occupational Therapy and Train Handling Common Medical Emergencies in Rural Settings**
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**Keywords:** Community occupational therapy, Medical emergencies, Community Gatherings

**ABSTRACT**
Lack of resources, poor methods of creating awareness are common reasons for poor outcomes following common medical emergencies in villages. Knowledge and role of occupational therapy in community settings is almost negligible.

**Aims/Objectives:**
Objective was to develop and test a simplified and easily implementable technique which has higher penetration amongst masses. This will be used to teach village residents in understanding common medical emergencies and their management and role of occupational therapy in community.
**Material & Methods:**
Audio-visual training aids in local language were used during community gatherings to teach village residents about these conditions and their handling in the rural setting. Understanding & Awareness of the above mentioned conditions and handling was assessed using a 30 item questionnaire administered in local language before and after the training.

**Results & Discussion:**
A significant improvement in the understanding and awareness was noted post training in 70% of participants. They were better informed, had good understanding of the do’s & don’ts & showed better ability in handling of common medical emergencies like Head Injury, S.C.I., other traumatic conditions, snake bite, and Epilepsy. Also they had a better understanding about role of occupational therapy in the community.

**Conclusion:**
Audio-visual training in local language during community gatherings can be used as a potent and inexpensive technique in the rural settings to create awareness and train handling of common medical emergencies and provide insight about community based occupational therapy.

**Pre-diagnosis Health Screening Programme by Paragynaec Health Workers: an Intervention to Reduce Burden of Diseases on Rural Women in Purandar Block, Pune District, Maharashtra.**

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**Keywords:** Pre-diagnosis Screening Program, Access to Health Care, Paragynaec Health Workers, Women's Health Needs

**ABSTRACT**
Many women in developing countries die or suffer from reproductive & gynecological morbidities that are largely preventable, in their prime of productive lives. MASUM has been working on community/women health issues with trained rural women as paragynaec health workers challenging issues of inequality.

**Aims/Objectives:**
(1) To assess the available health care services at the community health centers at Udaipur district. (2) To conform the available services vis-à-vis prescribed under “Indian Public Health Standards 2007” and finds the gaps in these services.
Material & Methods:
The present study was cross-sectional study conducted at all community health centers at Udaipur district during July 2011 to September 2011. Data was collected on predesigned and pre-structured proforma through observation, records available and interviews of medical officer in-charge and concern staffs.

Results & Discussion:
Out of 21 CHC’s only 14.3% CHCs having availability of services of paediatrics, 23.8% CHC’s having services of surgeon, 33.3% CHC’s having a physician.62% CHCs are still not having the services of a obstetrics/gynaecology. 33.3% of CHC’s are providing Family planning services, emergency obstetric care only at 4.8% CHC’s, emergency care of sick children at 19% CHC’s and availability of blood storage facility only at 4.8% CHC defy IPHS on this account to a greater extent.

Conclusion:
After six years of execution of NRHM, the findings have been an eye opener and lead us to make some recommendations i.e. there is an immediate need to fulfill the commitment and ensure availability of specialists at CHCs as per proposed norms. Assured services like emergency obstetric care, new born care, safe abortion services and treatment of STI/RTI still remain a distant dream for the tribal population and needs immediate attention through periodic mobilization with some incentive of specialists from urban areas.

Attitude and Inclination Towards Rural Healthcare Careers: A Study Among Medical Students in the National Capital Region, India
Saini NK, Sharma R, Roy R, Verma R. Department of Community Medicine, Fourth floor, University College of Medical Sciences, UCMS & GTB Hospital, Delhi, India-110095.
Keywords: Barriers, doctors, India, rural workforce shortage.
ABSTRACT
The rural health system in India has long been disadvantaged by a shortage of health staff, including doctors. This study examined the attitude of and inclination to rural healthcare careers among medical students.

Material & Methods:
A cross-sectional study was performed on 201 students from two medical colleges in the National Capital Region (NCR) of India. A pre-tested questionnaire was used to obtain information about students’ views about a rural health career.

Results & Discussion:
Of the respondents, 160 (79.6%) had a rural background. The current status of rural health services in India was rated as unsatisfactory by 178 students (88.6%). Of the students, 68 (33.8%) were willing to set up their practice in a rural area after graduation. Students with a rural background were more likely to be willing to practice in a rural area, and those whose parents were highly qualified were significantly less likely (p=0.004). Potential benefits of working in a rural area included ‘health services for the poor’, and ‘knowledge gain about rural people and their diseases’. Potential drawbacks included ‘lack of infrastructural facilities’, ‘less salary’ and ‘low standard of living’. A majority of the students believe the medical curriculum needed modification to improve student awareness of rural needs.

Conclusion:
The medical students surveyed had a positive view of the importance of rural health care. However, factors such as infrastructure and salary were perceived as potential barriers to a career in rural health. The findings are a starting point to understanding the attitude of medical students towards rural health care and designing specific strategies to overcome the shortage of rural doctors in India.

Antibiotic Use Among Health Science Students in an Indian University: A Cross Sectional Study
Avinash Kumar, Mandeep N, Suma Nair, Darshan BB, Dept.of Community Medicine, Kasturba Medical College, Manipal. Manipal University
Keywords Antibiotic Resistance, Selfprescription, Health Science
ABSTRACT
Antibiotics are the most frequently prescribed medication in modern medicine. Used properly they are a powerful tool but misuse and consequent development of resistance on the other hand is a cause for concern.

Aims/Objectives:
To identify the knowledge and practice of antibiotics use and the extent of selfmedication with antibiotics among health science students in a university in south India.

Material & Methods:
This was a cross sectional questionnaire based study carried out among under graduate students from various health sciences discipline namely Medicine, Dentistry,Pharmacy and Nursing. A random sample of 531 students (proportionate to population size) was included into the study and those with a history of any chronic disease requiring long term
treatment were excluded

Results & Discussion:

Of the 531 recruited 451 consented to participate (response rate of 85%). Majority were from the MBBS stream (43%) and the remaining were distributed between dentistry, nursing & pharmacy respectively (20%, 20%, 17%). Nearly everyone had used antibiotics (98.7%) sometime or the other and almost 58% in the last 3 months. Nearly 39% frequented Antibiotic use over 3 times in a year. Thirty percent had procured the antibiotic over the counter without a valid prescription. Common conditions that the Antibiotics were used ranged from mild fever, cold and diarrhea to acne & skin infections. Most popular antibiotics were the lactam group with over 44% vouching its use. Students from Dentistry were most likely to complete a course of Antibiotics once started. Self - prescription was more common among students from Medicine & Dentistry (25% & 36% respectively).

Conclusion:

Antibiotics are used frequently by the health science students and most often for relatively minor illness. Self-prescription and over the counter approach is another area of concern. Awareness campaigns and strict guidelines as to the use and procurement of Antibiotics appear to be the need of the hour.

Evaluation of Education Program for Cancer Screening in the Korean Rural Area for 4 Years

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ABSTRACT

To improve the cancer screening rate, there require multiple strategies including not just public relations with mass media but also the efforts to increase community capacity of taking cancer screening. Increased community capacity means that the abilities affected its own life are empowered, then they support themselves to control their own life. Specifically small city and rural area not metropolitan area are operated within the community, and the community could improve the cancer screening rate effectively through the efforts of increased the community capacity rather than individual approach or public relations. Thus, we introduced a new educational program called 'Navigator education program' which applied the participatory approach. Its aim is to promote the cancer screening rate in small city and rural community. On these programs, Lay Health Advisor (LHA) or navigators who are the participants in the community provided people with the information of cancer, advice, emotional support or help, and the community capacity for cancer screening was increased. The objectives of this study were to develop and evaluate a culturally acceptable navigator education program for cancer screening in the Korea for 4 years.

Methods:

The program for training of cancer screening navigator was composed of 12 hours education; knowledge of cancer screening, self-efficacy, and theory practice of communication. Then, the effectiveness of training program was measured for the changes of knowledge, self-efficacy and communication skills. And after 1 year, satisfaction degree, influencing degree, the changes of knowledge, self-efficacy and communication skills of the navigators were measured to self-evaluate the navigators activities.

Results and conclusion:

According to our results, navigator program could be applied effectively to communities. The program could contribute on the improvement of screening rate though community capacity building. A participant-centered and community-based approach is a useful and appropriate method of public health leadership at the community level.

Changes in the Knowledge and Perception Regarding Reproductive Health Amongst Adolescent Boys of an Ashramshala Following Training Interventions

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Keywords: Adolescent, Puberty, Reproductive Health

ABSTRACT

Adolescence is an age marked by attributes such as rapid physical growth and development; & sexual maturity. The current study aims at assessing awareness and perceptions affecting sexual behaviour and attitude towards puberty, marriage, conception, STIs, HIV/AIDS and contraception among adolescent boys of a Ashramshala followed by appropriate training interventions.

Aims/Objectives:

1. To assess the change in knowledge of adolescent boys regarding •Pubertal changes. •Marriage. •Contraception, following training interventions.
2. To determine their awareness regarding STIs including HIV/AIDS and their prevention.
3. To evaluate their attitude on the issues of healthy family life.

Material & Methods:
Study Area: Ashramshala located in the field practice area of the RHTC of our institute.
Sample Size: 110 male students of classes 9-12 were included for the study by universal sampling.
Questionnaire: A semi structured Pre test and Post test Questionnaire administered to the students with appropriate training interventions.
Teaching aids used: Chalk and talk; Body Mapping; Flip charts.

Results & Discussion:
Pre test showed that of the respondents 16% could correctly mention 50% physical changes occurring in boys during Puberty. Only 8% could mention the pubertal changes in girls correctly. Awareness increased to 85% and 52% students answering at least 50% changes correctly in post test respectively.
There was a significant increase in awareness regarding Consequences of Unsafe sexual relations(42% to 77%), STIs and their prevention(55% to 88%), Pregnancy(29% to 88%), and Contraception(20% to 66%).
A Significant change in Perceptions regarding Marriage and Family Planning was also noted in the students.

Conclusion:
Imparting training to adolescents on issue of Reproductive Health sensitizes them towards health empowerment at an early stage

The Role of CT of the Abdomen in Enabling Junior Residents to Accurately Diagnose Patients with an Acute Abdomen
Shunji Okae, Hisashi Usami, Yuko Kamioka, Masaya Matsushima, Maki Kato, Anjo Kosei Hospital, Japan

Key Words: CT of the abdomen, acute abdomen, junior residents

ABSTRACT
Junior residents being trained in the emergency room of a general hospital located in rural Japan, routinely examine patients deemed to be at high risk for an acute abdomen. This study retrospectively evaluated their diagnostic performances, specifically evaluating the rate with which our junior residents accurately diagnosed cases of acute abdomen.

Aims/Objectives:
The purpose of this study is to evaluate the role of CT of the abdomen, as ordered by the junior residents in the emergency room in enabling them to accurately diagnose cases of acute abdomen.

Material & Methods:
137 patients (77 men, 60 women, mean age 45.7±25 years) with endoscopically, or surgically confirmed cases of acute abdomen were discussed at emergency room case conferences. During these conferences, we compared each patient’s findings on CT of the abdomen with the findings on endoscopy or surgery. In so doing, we were able to determine the efficacy of CT of the abdomen at enabling junior residents to accurately diagnose cases of acute abdomen.

Results & Discussion:
95 of the 137 patients (69.3%) were accurately diagnosed with an acute abdomen by junior residents who ordered CT of the abdomen in an emergency room setting. Our results indicate that CT of the abdomen is especially effective at enabling the diagnosis of such acute intraabdominal pathology as gastrointestinal perforation, acute appendicitis, and intestinal obstruction, all of which pose a very high risk of patient mortality.

Conclusion:
CT of the abdomen is an effective diagnostic tool when junior residents in an emergency room setting encounter patients with an acute abdomen, particularly when the patients present with forms of high risk acute intraabdominal pathology.

Assessment of Training Needs of School Children to Enable Them to Respond to Emergency Health Situations in the Rural Field Practice Area of a Tertiary Care Hospital
Dr. Aparna Sundaresan Iyer, Dr. Sunita S. Shanbhag, Dr. R.R Shinde., Department Of Preventive And Social Medicine, Seth G.S, Medical College, K.E.M Hospital, Parel, Mumbai-400012

Keywords: Adolescent Children, Village School, Emergency Health Situation.

ABSTRACT
Emergency health situations like sudden illness, injuries or bites may occur amongst children at school, at home or outdoors which can often lead to serious consequences threatening life unless timely management is done to help minimise the gravity and period of morbid situation until taken to a professional health care facility. A baseline assessment of knowledge regarding response of school children and effectiveness of training in this regard is estimated in the study.

Aims/Objectives:
Aim: To assess the training needs of school children and scope of improvement in responding to emergency health situations in a village school in the rural field practice area.

Objectives:
• To assess their baseline knowledge to common emergency health situations
• To educate the students on various emergency response issues through lecture and demonstration session.
• To reassess the effectiveness of the training and
• To formulate the training needs of the school children regarding the same.

Material & Methods:
102 adolescent children of standard 9th and 10th in a village school of Khardi, Thane District were given a pre-test questionnaire of 21 items to assess their baseline knowledge. Detailed information was imparted and was followed by question answer sessions. 8 weeks later their knowledge was reassessed.

Results & Discussion:
60.78% were boys and 39.21% were girls. The following results were seen: Baseline information from pre-test revealed total mean score of 8.56(out of 21) and post-test total mean score was 18.91 with S.D 2.70 and 1.82 respectively. The difference between the two means is significant since significant value(p) is < 0.05.

Conclusion:
Awareness amongst school children regarding response to emergency situations was quite low. Self empowering education could build a knowledge pool which may be translated into action in emergencies. A short duration training could help enhance this pool.

Communicable & Vector Borne Diseases

Occurrence of Zoonotic Diseases in Rural Community
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Key Words: Zoonotic diseases, rural areas, public health

ABSTRACT
A number of zoonotic diseases affect people all around the world. The nature of disease epidemiology is different in rural and urban areas thereby creating a impact which has long lasting effect in the region.

Aims/Objectives:
The study was done to know the zoonotic diseases and the nature of their spread in rural areas with facilities not at par.

Material & Methods:
The present study was conducted on 5 villages near Pantnagar which had rare connectivity with the town or were far away from public health and municipal services. The residents had poor standards of living, reared ill health animals besides having close association with pet animals. The services of a veterinarian were not accessible either because of the location or they could not afford the expenses. Slandered survey method was used through questionnaire and interview.

Results & Discussion:
The study revealed that the extent of occurrence of diseases and the problems faced by the people in rural areas differ from that of urban areas. Poor people are more likely to suffer from zoonotic diseases for several reasons. Poor education, poor veterinary and public health services, poor sanitary conditions, close contact between animals and man are some. Rearing cheaper animals which are often less healthy and consumption of uninspected meat also increases the risk of getting infection. Poor people who are undernourished become more susceptible to infectious diseases. There is a far greater likelihood of contact between livestock and wildlife in rural areas.

Conclusion:
Hence, it was concluded that the importance of zoonotic diseases in rural areas extends beyond the realm of public health. Apart from affecting the human health, they also affect the agricultural production and harm the social structures of a community. The areas being more remote always have less access to public health care and veterinary care at its door.

Knowledge and Attitude Towards Tuberculosis Among Rural Population
Dr. Shobha S Karikatti, Associate Professor, Dept. Community Medicine, BIMS, Belgaum

ABSTRACT
T.B. is one of social disease with medical aspects affecting annually a billion people and people tend to neglect the disease till end stage. Men have to deal with stigma at their workplace and women at family or community. Though the RNTCP has achieved aim of 85% cure rate still there is inadequate reporting and poor adherence to treatment of tuberculosis as many factors like lack of awareness of T.B., subjective misconceptions regarding treatment, poor communication with health care provider, lack of social support etc, which can be identified from case studies or qualitative studies like KAP studies. Such studies can explore much information regarding health seeking behavior or care during illness.

Objectives:
1) To assess the knowledge of tuberculosis among rural population.
2) To know the attitude towards prevention and control of tuberculosis among rural population.

Material And Methods:
The present KAP study was a cross sectional study conducted in Uchaagon, a rural primary health training centre of department community medicine, BIMS, Belgaum covering a population of 41,868. The calculated sample (n=200) was selected from 4 randomly selected villages from the PHC area. Data was collected by interview method, using a standard pre-design and prestructure questionnaire. The questionnaire included health seeking behavior, knowledge and attitude about T.B, stigma, types of health facility available, knowledge of spread of disease, sciences/signs/symptoms of TB, its prevention and control of TB etc.

Results:
The survey was carried out among adult rural population including females. The study results showed that 45% of people have easy access to the health facility and 19% of participants heard about TB from family and friends whereas 16% learnt it from health workers. In the present study 29.5% people said that, they do not know any symptoms of TB and 59% did not know about transmission of TB. The attitude towards getting infected with TB was assessed which showed that 84% think they will not get TB, 71% said that they would approach doctor if they get TB and only 13% knew that DOTS is free where as 10% people thought that TB treatment is very causally. The survey concludes that, still people are unaware of TB, its symptoms and treatment facilities etc. Being the Border district Uchagoan faces the problems with languages which may be affecting the awareness level about TB failing to change their attitudes towards disease prevention. The Programme need to attempt to overcome such cultural and language barriers by appropriate IEC activities with the help of local or neighbor district programme for better detection and reporting of TB cases from remote places.

Effectiveness of Video Assisted Teaching Programme (VATP) on Knowledge Regarding Care of Tuberculosis Among Care Givers of TB Patients
Ms. Sunu Thomas M.Sc (N)

Keywords: Tuberculosis, Video assisted teaching programme, Caregiver, Knowledge

ABSTRACT
The aim of the study was to assess the effectiveness of video assisted teaching programme on knowledge regarding care of tuberculosis among care givers of TB patients and to explore association between knowledge level with their selected demographic variables. Breathing is one of the most important activities of human life. In our society, many people suffer from respiratory illness. Children and old adults are the most affected by this problem. Tuberculosis is the most common respiratory disease in the world. The average prevalence of all forms of tuberculosis in India is estimated to be 5.05 per thousand, prevalence of smear-positive cases 2.27 per thousand and average annual incidence of smear-positive cases at 84 per 1,00,000 annually.

Material and methods:
A quasi experimental study, pre and post test design without control group approach undertaken in medical wards of PRH, Loni. Data were collected from 50 caregivers of tuberculosis patients to assess the effectiveness of video assisted teaching programme on knowledge regarding care of tuberculosis. The content of VATP consists of the following areas: introduction, care of fever, prevention of malnutrition, safe disposal of sputum, prevention of infection, breathing exercise, medication compliance, conclusion. Pre test was conducted by using structured questionnaire for assessing the knowledge regarding care of tuberculosis among caregivers of TB patients. Post test was done five days after implementing the video assisted teaching programme. The collected data was tabulated and analyzed by using descriptive statistics ie., Mean, Standard deviation and Mean %. The inferential statistics like paired ‘t’ test was used for assessing the effectiveness of video assisted teaching programme. Chi square test was used to find the association between the knowledge level with their demographic variables.

Results:
Findings in relation to caregivers revealed that (34%) were in the age group of 29-38 years, (64%) were females, (32%) had primary education, (40%) were house wives, (50%) had per capita income Rs. 1001-1500, (80%) were from rural areas, (88%) were Hindus, (56%) were daughters, (40%) received information through health care professionals. Overall pre test knowledge score was (14.2± 4.56) which is 40.62%, which shows that the caregivers had average knowledge, whereas in post test the overall knowledge was (20.62±4.50) which is 58.91% suggests that the caregivers had good knowledge on care of tuberculosis with the effectiveness of 18.29% (‘t’=9.51, p<0.05) There was highly significant difference found between pre test and post test knowledge scores (p<0.05) and there was significant association found between knowledge scores with demographic variables like educational qualification (x2=7.71) and monthly income (x2=3.92) (p< 0.05).

Conclusion:
The major conclusion drawn from this study was that VATP found to be effective in improving the knowledge of the
care givers on care of TB patients. So it should be emphasized that having educational sessions with the caregivers and family members regarding care of TB patients with educative materials like video assisted teaching would thereby improve their knowledge which leads to better care for the symptoms, treatment compliance, early recognition and prevention of complications.

Cholera Outbreak In Ukkali Village, Tq.: Basavana Bagewadi, Dist. Bijapur, Karnataka State.
K.A.Masali, S.M.Biradar, Vidya Ugran, Vijaya Sorganvi, Chandrashekhar.
Keywords: Cholera, Gram-panchayat, Epidemic curve, hanging drop method
ABSTRACT
As such Cholera diseases have been controlled in India, Though usually cholera outbreak occur & become epidemic because of contamination of water and less personal hygiene of individuals, also improper sanitation near by hotels & busstand. Where you can see plenty of house flies which are the main transmitter. The population of village Ukkali is 11091 – (2001 census). Sever diarrhoelas reported and send to district hospitals & BLDEA’s. Shri.B.M.Patil Medical College, Hospital and Research Centre, Bijapur. Two cases were detected as cholera after doing hanging drop method cases reported from 31.05.2010 to 27.06.2010 more cases reported on 15.06.2010 later tapered (epidemic curve showed) most of the cases reported at PHC Ukkali and treated and remaining few cases refereed to civil hospital Bijapur and Shri.B.M.Patil Medical College, Bijapur, diarrhoea is treated first with oral dehydration and parenteral route of administration given Glucose or ringer solution. Anti inflammation drugs, Antibiotics Tab. Tetracycline drugs 250 mg Qds or 500 mg BDS for 5 to 7 days. Total case reported during out break was 39, previously collected contaminated water sample sent to Taluka hospital Basavan Bagewadi on 10.6.2010, 1 bottle – 30 ml. Water was report & water was unfit to drink. But chlorination of water had done on 15.06.2010, by Grampanchayat. Second sample of water sent to Taluka hospital on 18.06.2010. 5 bottles with 15 ml. (30 ml x 5 bottle) & the report was, water is fit suggesting no organisms found.
Objectives:
1) To determine the nature and extent of the out break disease like Cholera &diarrhea 2) To find out source and probable mode of transmission. 3) To control further spreading.
Methods & Materials
House to house survey had done, participants 3-Tutors, 20- internees, 3- PG’s. 2- Assist Prof, 1 Professor, total 29. Prepared questionnaire were used & interrogated in every house survey was done on 1.7.2010 to 3.7.2010.
Participants: Head of the family of all houses.
Study design: Descriptive, study retrospective study.
Statistical analysis: Epidemic curve.
Death Report: Nil
Assess the Awareness and Attitude on HIV/AIDS Amongthe Rural Population.
Ms Heera Jayasheela, MSc (N), Associate Professor, PIMS (DU), CON, Loni (Bk),. Dist. Ahmednagar
Key words: Awareness, Attitude and HIV/AIDS.
ABSTRACT
Human immunodeficiency virus (HIV) is a retro virus that can lead to acquired immune deficiency syndrome (AIDS). Acquired immune deficiency syndrome is a collection of symptoms and infections resulting from the specific damage to the immune system caused by Human Immunodeficiency Virus. India’s population is so large, it is third in the world in terms of greatest number of people living with HIV infection with a population around a billion, a mere 0.1% increase in HIV prevalence would increase the estimated number of people living with HIV by over half a million. Maharashtra, Andra Pradesh, Tamilnadu and Karnataka are the states which show the highest prevalence of HIV / AIDS. Existing evidence indicates that public awareness on HIV/AIDS is inadequate.
Materials and Methods:
The present descriptive study was conducted to assess the awareness level and attitude on HIV/AIDS among 50 people residing in Loni village. The samples were selected through non probability, purposive sampling method and structured questionnaire was used to collect the data. The structured questionnaire consists of section-A socio demographic data (8 items) and section B consist of structured knowledge questionnaire on HIV/AIDS (20 items and section C consist of attitude scale (15 items). The awareness level is categorized based on scores as poor, average and good; and attitude as negative, neutral and positive. The collected data were analyzed by descriptive and inferential statistical methods.
Results:
Study findings revealed that highest percentage (40 %) belongs to age group 18-28 years, (60 %) were male, (66% ) belong to Hindu religion, (68%) were married, (42% ) had primary education, (44%) were farmers, (40 %) of the samples had monthly income of 3000-6000,(48 %) had information on HIV/AIDS via TV/Radio. The overall awareness mean
score was (12.0±1.74) which is 60% indicates people had average level awareness on HIV/AIDS. However the highest mean score (3±1.02) which is 75% indicates people had good level of awareness in the area of ‘preventive and control measures on HIV/AIDS’ and the lowest mean score (1.13±0.9) which is 56.5% was obtained on the area of ‘etiology and risk factors of HIV/AIDS’. The people had positive attitude on HIV/AIDS with the mean score of (52.04±2.0) which is 69.38%. There was no significant association found between awareness with their demographic variables.

Conclusion:
Prevention is always better than cure. The preventive and control measures against HIV/AIDS emphasizes on instilling positive attitude within people to practice healthy life style for long and productive life rather than treatment. Health promotional activities among rural population on HIV/AIDS can be created by mass educational programme by the Health authorities and Professional groups.

Comparative Analysis of H1N1 (Swine Flu) Awareness Among Adolescents of Urban and Rural Population.
Manjrekar SS1, Mayur SS2, Chowti JV3, 1Post Graduate student, 2Associate Professor, 3Professor and Head, Department of Community Medicine, SDM College of Medical Sciences and Hospital, Dharwad.

Keywords: Adolescents, Awareness, Health education, Swine flu.

ABSTRACT
In April 2009 a new strain of influenza virus, A/H1N1, commonly referred to as “swine flu,” began to spread in several countries around the world, which led the World Health Organization to declare a global pandemic. Encouraging the public to undertake specific behaviours related to hygiene has proved useful in controlling previous outbreaks of infectious disease. Studies of how people responded to the outbreak of severe acute respiratory syndrome in 2002 suggest that perceptions or beliefs about an outbreak are important in determining compliance with official advice.

Objectives:
To study and asses the knowledge regarding H1N1 and to provide health education to adolescents of rural and urban population.

Setting and design:
A Community Based Cross-Sectional Study, field practice area, Department of Community Medicine, SDMCMSH, Dharwad.

Methods:
House to House survey was conducted for a period of two months among adolescents who consented to participate, and data was collected using predesigned and pre-tested proforma.

Result:
Awareness was as high as 99% in urban area, while it was 73% in rural area. Overall 11.05% did not know the mode of transmission. Smokers were considered to be at maximum risk of transmission by urban participants (41.41%), while rural participants (21.92%) thought it was healthy people. Overall only 15.12% thought laboratory diagnosis was by swab or sputum examination and 67.44% thought that environmental factors were responsible for the disease. Only 68.49% of rural participants thought the disease to be curable as against 86.87% of urban participants.

Conclusion:
Awareness is the only key to the prevention of H1N1 among adolescents, as they are at increased risk, and which if rightly done, would serve the purpose of reaching the mass at negligible cost. Hence continuous health education improves their knowledge, develops positive attitude and helps in developing healthy practices.

Knowledge, Attitude, Behaviour and Practice on Locally Endemic Mosquito Borne Diseases in Rural Areas of Rajkot District, Gujarat, India.
Dr. Mayur Vala1, Dr. Umed V. Patel2, Dr. P. B. Verma3, 1Resident, 2Assistant Professor, 3Professor and Head, Community Medicine Department, PDU Government Medical College, Rajkot

Keywords: mosquito borne disease, knowledge, practice, malaria

ABSTRACT
Mosquito borne diseases are still major health problem in rural areas even after implementation of National Vector Borne Disease Control Programme in India. It is inevitable to understand the level of knowledge of community, their attitude and practices regarding mosquito borne diseases for effective control of disease.

Aims/Objectives:
To study Knowledge, Attitude, behavior & Practice regarding mosquito borne diseases
To assess the health problems occurred due to mosquito borne diseases

Material & Methods:
The present study was carried out in six rural areas of three different Talukas of Rajkot district. From each Taluka, two areas including one highest API area and one lowest API area was selected. 36 households from each area and thus total
216 households were selected for study. Data was collected using pretested semi-structured questionnaire during high transmission season of mosquito borne diseases.

**Results & Discussion:**
13.43% had wrong knowledge about mosquito breeding places. Regarding diseases transmitted by mosquitoes, 81.48% answered malaria, 12.50% dengue, 23.61% chikungunya and 16.20% were not aware. 18.52% did not know about dengue transmission. 85.19% respondents knew that mosquito borne disease can be prevented by using personal protective measures against mosquito bites and 6.48% didn’t know about prevention of mosquito borne diseases. 38.89% didn’t use anything for prevention against mosquito bites. 36.11% households had fever cases during last 6 weeks and 88.43% consulted Government sectors for treatment.

**Conclusion:**
Intensified integrated efforts including public participation is required to prevent and control mosquito borne diseases.

**Exploring Household Wastes as Larval Habitat of Dengue Vectors in Rural West Bengal, India: Implications For Environmental Health Management**
Soumyajit Banerjee1, Gautam Aditya2, Goutam K Saha1, 1. Department of Zoology, University of Calcutta. 35 B. C Road, Kolkata 700019, India, 2. Department of Zoology, The University of Burdwan, Golapbag, Burdwan 713104, India

**Keywords:** Household wastes, dengue vectors, rural areas, Discriminant analysis

**ABSTRACT**
Glass and plastic materials constitute bulk of household wastes. Due to their resistibility, slow degradability that accounts for higher residence time, these materials qualify as potential hazardous wastes. Retention of water permits these wastes to form a congenial biotope for the breeding of different Vector mosquitoes. Thus plastic and glass wastes pose a risk from public health viewpoint

**Aims/Objectives:**
The present survey was carried out in rural regions of Kolkata to identify and classify those hazardous containers responsible for harbouring Aedes and thereby assess the immature productivity.

**Material & Methods:**
The screening of various plastic and porcelain household wastes for Aedes larval habitats was carried from selected rural sites around Kolkata on monthly basis between July and December during 2009-2010. Data on positive larval habitats and abundance were subjected to factorial ANOVA using habitats, area, month and species and location as variables to comment on the variations in the positive habitats of dengue vectors.

**Results & Discussion:**
The number of household wastes positive for Aedes larval habitats varied among the months and area. Multivariate analysis revealed significant differences in abundance of Ae. aegypti and Ae. albopictus in the rural areas.

**Conclusion:**
A link between household wastes with Aedes productivity is expected to increase the risk of dengue epidemics if waste generation is continued without appropriate measures to limit addition to the environment. Alternative strategies and replacement of materials with low persistence time can reduce this problem of waste and mosquito production.

**Rural-Urban Dichotomy in Prevalence of Tuberculosis in India: an Analysis of Socioeconomic Perspective**
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**Keywords** Women, Rural-Urban, Noncommunicable Diseases

**ABSTRACT**
Tuberculosis is a major cause of suffering and affects mostly the poor and disadvantaged in resource poor countries. According to a recent World Health Organization (WHO) report on tuberculosis, India has a largest pool of people infected with mycobacterium tuberculosis of any nation. In India numerous studies have examined socio-economic inequality in maternal and child health and utilization of healthcare services. However, very limited study documented socioeconomic inequality in communicable and non-communicable diseases. Moreover, the extent of such inequality in tuberculosis over the period is under searched, a study documented only for a time period.

**Aims/Objectives:**
This study examines the extent of socio-economic inequality in prevalence of tuberculosis in India.

**Material & Methods:**
Using the multi-rounds of the National Family Health Survey conducted during 1992-2006, this study examined trends and pattern of prevalence of tuberculosis across the place of residence in India. Prevalence of tuberculosis is estimated as total number of cases per 100000 populations. Descriptive statistics, rich-poor ratio, and binary logistic regression analysis is used to understand the socio-economic inequality and determinants of tuberculosis in India across place of residence.
Results & Discussion:
The results show that prevalence of tuberculosis is much higher in rural areas than urban areas, among males than females. Age differences are marked indicating that higher prevalence among older than younger population. Pattern of differentials across residence remained similar over the period. Rich/poor ratio indicates that the prevalence is higher among poorest than rich people. Moreover the gap is pronounced in rural than urban area.

Conclusion:
Result of multivariate analysis indicates that place of residence and housing environment is a significant determinant of tuberculosis in India after adjusting other factors. The other determinants are gender, age, education and economic status of the household. However these are not evenly significant over the period.

Bio Efficacy of Neonicotinoid Insecticide: Imidacloprid Against Mosquito Larvae, Culex Quinquefasciatus (SAY)
Sweta Bhan, Shrankhla, Preeti Sharma, Lalit Mohan And C.N. Srivastava, Dayalbagh Educational Institute, Applied Entomology & Vector Control Laboratory, Department of Zoology, Faculty of Science, Dayalbagh Educational Institute (Deemed University)

Keywords Culex Quinquefasciatus, Neonicotinoid, Imidacloprid, Lymphatic Filariasis

ABSTRACT
Insect transmitted disease remains a major source of illness and death worldwide. Mosquitoes alone transmit disease to more than 700 million persons annually. Culex quinquefasciatus, is one of the potential vector for Wuchereria bancrofti, the causative agent of human lymphatic filariasis. Worldwide about, 120 million persons are affected by lymphatic filariasis (WHO 2002). One third Indian population is infected with elephantiasis. Mosquitoes develop resistance against many effective insecticides. There is therefore, an urgent need to identify an effective insecticide to suppress the mosquito population. Imidacloprid, is a neonicotinoid insecticide which has been widely used as pest control agent on many crops. It causes blockage in neural pathway which leads to the accumulation of more amount of acetylcholine resulting in the death of the pests.

Aims/Objectives:
The aim of the present work is to investigate an effective insecticide to suppress the mosquito population, Culex quinquefasciatus. For this purpose imidacolprid has been selected for our work.

Material & Methods:
The larvicidal efficacy of imidacloprid was determined against third instar larvae, Culex quinquefasciatus under the laboratory conditions. The experiments were conducted according to WHO standard procedure. After 24 and 48hrs of exposure LC50 and LC90 values were calculated.

Results & Discussion:
The results showed that imdacloprid has an encouraging larvicidal potentiality against the third instar larvae, Culex quinquefasciatus

Conclusion:
From the results it can be concluded that the imidacolprid has an excellent potential for controlling the culicine larvae with less or no toxic effects against the higher organisms including human beings.

Larvicidal Potentiality of Pseudocalymma Alliaceum Against Malaria Vector, Anopheles Stephensi
Shrankhla, Sweta Bhan, Preeti Sharma, Lalit Mohan And C.N. Srivastava, Applied Entomology & Vector Control, Laboratory Department of Zoology, Faculty of Science, Dayalbagh Educational Institute (Deemed University)

Keywords Pseudocalymma Alliaceum, Anopheles Stephensi, Plasmodium, Vivax, Larvicidal

ABSTRACT
Vector-borne diseases are one of the major health problems in many tropical and sub tropical countries. Malaria, dengue, chikungunya, yellow fever, filariasis, and encephalitis are some of the deadly diseases spread by Anopheles, Aedes and Culex species of mosquitoes. Malaria is caused by Plasmodium vivax, transmitted by female Anopheles stephensi. Mosquitoes are controlled usually by the application of synthetic pesticides. The control of the mosquitoes has become complicated because of their resistance to synthetic insecticides, effect on non-target organisms and nonbiodegradable, therefore, hazardous to environment. Phytoproducts are the promising alternative to synthetic insecticides for the management of mosquitoes as they are ecofriendly, target specific and biodegradable in nature and can be used in the management of different insect pests. Moreover, it is very difficult for insect pests to develop resistance against crude plant extracts as compared to pure phytochemicals. The crude plant extracts, therefore, are preferred in the insect pest management as compared to phytochemicals.

Aims/Objectives:
To control the mosquito population by using the phytoproducts.

**Material & Methods:**
Pseudocalymma alliaceum, Anopheles stephensi, Petroleum ether, hexane and methanol.

**Results & Discussion:**
The result revealed that the hexane extract was found the most effective against the anopheline larvae

**Conclusion:**
It is concluded that this plant extract has remarkable potentiality as larvicide against malaria vector with ecofriendliness

**Density Effects of Intraguild Insect Predators on Mosquito Regulation**
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**Keywords**
Mosquito Control, Heteroptera, Intraguild Predation

**ABSTRACT**
In mosquito larval habitats predatory insects play important role in regulating mosquitoes and thus mosquito borne diseases. Prey–predator interactions between mosquito immature and predators hold the key to the success of such process. Intraguild predation mechanism among predators acts antagonistically to such process. In the present study impact of IGP was evaluated using two heteropteran predators Diplonychus rusticus (IG predator) and Anisops bouvieri (IG prey) and larvae of Culex quiquefasciatus as shared prey.

**Aims/Objectives:**
To assess the density impact of the IG predator on the mortality of mosquito larvae such that the success of regulation by aquatic predators can be judged. The ability of the D. rusticus as biological control agent in complex habitats can be assessed.

**Material & Methods:**
Field collected Heteropteran predators D. rusticus and A. bouvieri in three different combinations of density were allowed to prey upon mosquito larvae of four different densities under laboratory conditions. The data on predation was used for analysis of risk to predation of the mosquitoes.

**Results & Discussion:**
The presence of IG prey augmented mortality of the mosquito prey at higher prey density but not at low prey density. IG prey mortality was high at low prey density and low at higher prey density. The risk to predation of mosquitoes increases with the relative densities of IG predator. The highly significant (P<0.001) impact of IG predator density on prey mortality signifies that density impact of multiple insect predators on mosquito prey mortality is crucial to the success of mosquito regulation.

**Conclusion:**
In rural areas of India agro-ecosystems provide congenial habitat for the mosquitoes to thrive, which is a reason for prevalence of mosquito borne diseases in such areas. Augmentative release of aquatic insect predators in appropriate combination would bring higher success rate which otherwise may be affected by density related impact of IGP system.

**Knowledge of Tuberculosis among High School Students in Urban area Bangalore**
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**Keywords:** Tuberculosis, High school students, knowledge, Information booklet.

**ABSTRACT**
Tuberculosis continues to rank among the World’s most serious public health problems despite the remarkable achievements of discovering effective diagnostic and treatment measures. An estimated 1.7 million people died from TB of which 231,000 were those co-infected with HIV. India has the highest TB burden- 5000 people develop this disease and 0.37 million people die every year. In India 3, 00,000 children are taken out of school every year to take care of parents with Tuberculosis. They are particularly vulnerable to infection from household contact by parents or relatives with active infectious Tuberculosis. Mere access to health facilities with free anti-Tuberculosis drugs may not be enough to bring about desired success in Directly Observed Short course Chemotherapy. Our country needs new partners to fight against Tuberculosis. Students are in the process of continuous learning in schools and are capable of propagating correct information about Tuberculosis not only to friends and families but also to community at large.

**Aims/Objectives:**
The present study was carried out with the objectives to assess the knowledge of high school students about Tuberculosis, to find out the association of knowledge with baseline variables and to prepare an information booklet on tuberculosis to school students.

**Material & Methods:**
A Descriptive cross sectional research design was adopted. Stratified random sampling technique was used to select 216 samples with an equal number of boys and girls. The data was collected from the urban schools of Bangalore. Data
Results & Discussion:
The result of the study denotes that 2.8% had good knowledge, 60.6% had moderate knowledge and 36.6% lacked knowledge about Tuberculosis. The study revealed that high school students had inadequate knowledge regarding the various aspects of Tuberculosis. Few of the students (20%) of students reported having their family members, relatives and neighbors exposed to tuberculosis and continuing treatment. There was no association between knowledge scores and selected baseline variables like student’s age, their source of information and their parent’s education, occupation and income. (P>0.05)

Conclusion:
Tuberculosis is preventable if people especially future generation (School Students) of our country are educated on the various aspects of disease. From the study, it is evident that high school students in general lacked knowledge about tuberculosis. Nurses could organize and coordinate with other organizations to provide mass education on Tuberculosis. They could impart education to school students by using educational material (Information booklet on tuberculosis based on study result). Child to child approach could be organized. Educating and guiding children should be an ongoing process by the Health Care Delivery System.

Awareness of HIV/AIDS Among Adolescent Males of Tribal Area of Western Maharashtra, India
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Keywords: /Aids, Awareness, Adolescent Males, Tribal Health
ABSTRACT
Young people aged 15–24 account for an estimated 45% of new HIV infections worldwide. The only way to fight against it is to have correct knowledge and awareness and converting this into responsible behavior. The epidemic has mainly involved urban and semiurban areas and now it is shifting towards rural areas. India has around 70% rural population, majority areas are remote and underdeveloped hence data related to them is scarce.

Aims/Objectives:
1. To study the awareness regarding HIV/AIDS and attitude towards PLWHA in adolescent males of tribal area of western Maharashtra, India
2. To study the relationship between sociodemographic factors and the awareness regarding HIV/AIDS

Material & Methods:
This is a cross sectional study carried out from January to December 2009 in a tribal village of Thane District under field practice area of RHTC of a medical college. Data is collected from adolescent males of age group 10 to 19 years using pretested semi structured interview schedule involving universal sample of 114.

Results & Discussion:
Fifty percent adolescents could correctly identify the unprotected sexual intercourse and 49.1% could identify infected blood and blood products as a mode of transmission. HIV can be transmitted from infected mother to child and via unsterile needle use was told by 38.6% and 31.6% adolescents respectively. Presence of a blood test to detect HIV infection was known to 26.3% and 49.1% adolescents knew that HIV is a preventable disease. Around 36.8% were aware that condom can be used for prevention. HIV positive person should stay in the family and continue to work at work place was the attitude of 27.2% and 11.2% adolescents respectively while 88.6% were against premarital sex.

Conclusion:
Results of the study show the significant gaps in the knowledge of prevention, transmission along with misconceptions.

Evaluation of Mass Drug Administration Activity For Filariasis Control in Rural Areas of Nagpur District (Maharashtra)
Sanjeev Chaudhary, Sanjay Kubde, Mohan Khamgaonkar, Amandeep Kaur Ratta, Dr. Sanjeev Chaudhary (Assistant Professor), Dr. Sanjay Kubde (Associate Professor), Dr. Mohan Khamgaonkar (Professor & Head), Dr. Amandeep Kaur Ratta (Junior Resident), Dept. of Community Medicine, Indira Gandhi Govt. Medical College, Nagpur (Maharashtra)
Key words: Lymphatic filariasis, Mass Drug Administration, Diethylcarbamazine, Evaluation.
ABSTRACT
Filariasis has been a major public health problem in India. Lymphatic filariasis (LF) cases are reported from 20 states/UTs including Maharashtra. Mass Drug Administration (MDA) activity is being undertaken annually in all endemic districts of these states since 2004 through which single dose Diethylcarbamazine (DEC) and Albendazole tablets are distributed by house to house visit. This survey was conducted for evaluation of the MDA activity in rural areas Nagpur district.
Aims/ Objectives:
To review the progress of activities of single dose MDA in the rural areas of Nagpur district.

Material and Methods:
In this Cross sectional survey, three clusters one from each village were selected randomly from rural areas of the district. The data was collected according to preformed and pretested questionnaire. The frequencies and percentages (proportions) were calculated.

Results & discussion:
There were total of 361 beneficiaries in the three selected clusters. Of them, only 58.44% beneficiaries consumed tablets against the 93.20% beneficiaries given drugs as per data provided by drug distributors to the Government.

Conclusion:
Main reasons for not consuming the drugs were beneficiaries not at home (66%) at the time of visit and lack of awareness regarding the importance of taking drugs in apparently healthy people (19%).

Non Communicable Disease: Part – I

Prevalence of Overweight and Obesity Amongst School Children Belonging to Lower Income Group (LIG) and Middle Income Group (MIG) From 5-18 years in National Capital Territory (NCT) of Delhi.

Dr. Umesh Kapil, Professor, Public Health Nutrition, Department of Human Nutrition. All India Institute of Medical Sciences. New Delhi

Key Words: Obesity, Body Mass Index, Triceps Skin Fold Thickness

ABSTRACT

Aims/Objectives:
The present study was conducted to assess the prevalence of overweight and obesity amongst children in the age group of 5-18 years belonging to Middle and Low Income Group In NCT of Delhi. Considering BMI cut off points the prevalence of OB in LIG and MIG school children was 0.1 and 0.6 percent respectively.

Material & Methods:
A total of 10,221 children (LIG 5087 and MIG 5134) were covered in the present study. Overweight (OW) and obesity (OB) were assessed using Body Mass Index (BMI) and Triceps Skin Fold Thickness (TSFT) age and sex specific cut off points.

Results & Discussion:
According to TSFT criteria the prevalence of OB in LIG and MIG school children was 1.0 and 2.9 percent respectively. The present study has highlighted that obesity is emerging health problem in children.

Conclusion:
Obesity has emerged as an epidemic in India

Relationship Between Locus of Control and Oral Health Among 15 Years Old Rural School Children

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Key Words: locus of control, oral health, rural, students.

ABSTRACT

The Locus of Control theory explains behavioral patterns. The theory proposes that a person with an internal Locus of Control interprets events as being dependent on his/her own behavior, and those with external Locus of Control, think that events are in some way dependent upon luck, fate, chance or the influence of other powerful persons. Applying this theory to health settings, those who feel that they have control over their own health and place a high value on it are more likely to pursue health-promoting behaviors.

Aims/Objectives:
To find a relationship between locus of control and oral health among 15 years old rural school children.

Material & Methods:
A total of 400 children 15 years of age from public and private rural schools formed the study population. The children were administered the Indian translation of the 18-item multidimensional Health Locus of Control scale, and subsequently examined for caries and oral hygiene. ‘t’ tests and correlation analyses was done using SPSS software.

Results & Discussion:
The results showed a significant relationship between higher ‘Internal’ Locus of Control and dental caries. Private school children had a significantly higher perception of ‘Powerful Others’ than their public school counter parts. When
compared against gender, it was seen that males had different perception than the females.

**Conclusion:**
The results of this study showed a definite interrelationship between Locus of Control, demographic status and oral health. This study highlights the need for further research into factors that influence the relationship between Locus of control and oral health.

**Empowering The Primary Health Care Professionals For Oral Cancer Screening**  
Dr. Khushboo Thakkar, Dr. D.Y.Patil Dental College And Hospital,  
**Keywords:** Primary Care, Oral Cancer, Screening  
**ABSTRACT**
Oral cancer is a global health problem with increasing rates of incidence and rising mortality rates. Screening for oral cancer might be useful, because of the easily detectable precancerous lesions, early invasive cancers, and improved survival after treatment of early stage cancers.

**Aims/Objectives:**
To assess change in knowledge, attitude and practice (KAP) regarding oral cancer and screening practices through visual oral examination among medical officers of primary health centres (PHC) in Pune district, Maharashtra before and after educational intervention.

**Material & Methods:**
Assessment of KAP was done using a 17 item questionnaire. Intervention in the form of health education was given on the same day. KAP was reassessed at 2 months.

**Results & Discussion:**
The educational intervention appears to have increased the KAP in oral cancer screening confirming the importance of continuing education.

**Conclusion:**
This study identified an existing gap in KAP among the medical officers and underscores the need to enhance oral cancer education among them.

**Extending Services for People with Dementia in Rural Areas: Evidence from a Model in Goa, India**  
Dr. Amit Dias, Epidemiologist and Geriatrician, Asst Lecturer, Dept of Preventive and Social medicine, Goa Medical College, Bambolim Goa  
**Keywords:** Dementia, non specialist health workers, RCT  
**ABSTRACT**
Dementia affects 36 million people around the world and 3.7 million in India. The changing family structure due to migration is decreasing the capacity of families to care for the elderly who prefer to live in villages. Almost 80% of Indians live in rural areas and there is a need to develop cost effective models using locally available resources to assist families in dementia care. The author is the founder member of the Gateway to Rural International Initiatives in Dementia (GRIID) aimed at Developing International Rural Dementia Care Excellence.

**Aims/Objectives:**
To develop and evaluate the effectiveness of a home based intervention in reducing caregiver burden, promoting caregiver mental health and reducing behavioural problems in elderly people with dementia.

**Material & Methods:**
This was a RCT in which the person with dementia & caregiver were randomly allocated either to receive the intervention or control group. It was carried out in communities based in two administrative blocks in Goa, India. Mild to moderate cases with dementia (DSM IV diagnosis) and their caregivers were included in the trial. Community based intervention was provided by a trained ‘non specialist’ health worker who was supervised by a counselor and a psychiatrist, focusing on supporting the caregiver through information on dementia & guidance on behavior management. We measured caregiver mental health (General Health Questionnaire), caregiver burden (Zarit Burden Score), distress due to behavioral disturbances (NPI-D), behavioral problems in the subject (NPI-S) and activities of daily living in the elder with dementia (EASI). Outcome evaluations were masked to the allocation status.

**Results & Discussion:**
Eighty one families enrolled in the trial; 41 were randomly allocated to the intervention group. 59 completed the trial and 18 died during the trial. The intervention led to a significant reduction of GHQ (21.12, 95% CI 22.07 to 20.17) and NPI-D scores (21.96, 95%CI 23.51 to 20.41). We also observed a non-significant reduction in the total number of deaths in people with dementia in the intervention arm (OR 0.34, 95% CI 0.01 to 1.03).

**Conclusion:**
A model using non specialist health workers could be a solution to the large treatment gap for people with dementia.
Effectiveness of Psychoeducational Intervention on Psychological Distress and Coping Strategies of Parents of Children with Cerebral Palsy

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Key Words: Cerebral palsy, psychological distress, coping strategies, psychoeducational intervention

ABSTRACT

A child born with disability has great negative consequences on the parents and the family. Cerebral palsy is the most common childhood disability and the affected children need long-term care.

Aims:

To assess the effectiveness of psychoeducational intervention on psychological distress and coping strategies of parents of children with cerebral palsy.

Material & Methods:

Quasi experimental study with one group pretest posttest without control group approach was conducted among 30 parents who were enrolled by purposive sampling attending the Pediatric Physiotherapy Department of Pravara Rural Hospital, Loni (Bk) using structured questionnaire. Psychoeducational intervention was provided for 3 consecutive days which included introduction to cerebral palsy, care of child and relaxation techniques for the parents of children with cerebral palsy. Post test was conducted one month after intervention. Data was analyzed using descriptive and inferential statistics.

Results:

Out of the 30 parents, all were mothers, 50% were below 25 years old, 40% had secondary education, 86.6% were housewives, 83% had non consanguineous marriage, 63.3% had monthly income between Rs. 5,000-10,000, 83% belonged to joint family, 56.6% had two children and 93% had received no information regarding special care of children. Findings related to children revealed that 63.3% were toddlers, 60% were females, 76.6% were first-borns, 93% were born by normal delivery, 73% were preterms, 77% had spastic cerebral palsy and 26.6% had seizures. The overall posttest mean percentage for psychological distress (46.57%) was lower than pretest mean percentage (56.44%) indicating that psychoeducational intervention was effective by 9.86% with t = 6.37, p<0.001. The overall posttest mean percentage for coping strategies was higher (70.93%) than pretest mean percentage (63.15%) indicating that psychoeducational intervention was effective by 7.78% with t=4.83, p<0.001. There was highly significant association between psychological distress and age of parents (X2 =16.42, p<0.01), significant association between psychological distress and type of family (X2=7.84, p<0.05) and also between coping strategies and age of parents (X2=4.82, p<0.05).

Conclusion:

The psychological support provided and the relaxation techniques taught by investigator helped parents to reduce psychological distress and adopt positive coping strategies.

Role Strain and Caring Behavior Among Care Givers of Cervical Cancer Patients

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Key Words: Caregivers, cancer, role strain, caring behaviors

ABSTRACT

It estimated that almost half a million women develop cervical cancer every year and more than half die of the disease. Coping with strain from cancer care giving may influence the quality of life of the caregivers.

Aims:

To assess the role strain and caring behaviors of caregivers of cancer cervix patients in the Oncology ward of Pravara Rural Hospital, Loni

Material & Methods:

Descriptive study design with exploratory survey approach was employed to collect data from 50 caregivers using structured interview schedule. Data were analyzed using descriptive and inferential statistics.

Results:

Findings in relation to caregivers revealed that 34% caregivers were 59 years and above, 56% were males, 42% were illiterate, 38% had agricultural work, 66 had income less than Rs. 5,000, 32% were children, 90% were living with the patient, 38% were caring the patient less than 3 hours per day and 86% had good health status. Findings in relation to cervical cancer patients revealed that 60% were > 51 years, 70% had stage II cancer, 56% had mild disability, 60% had duration of illness < 6 months and 40% had hospital stay < 5 days. The overall mean role strain score was (58.78+16.1) which is 47.02% of the maximum score suggesting mild level of role strain whereas the overall mean caring behavior score was (83.28+10.7) which is 83.28% of the maximum score indicating good caring behavior. However, moderate level role strain was in the area of 'financial aspects' and adequate level caring behavior on 'knowledge and skill' aspects. Significant association was found between role strain and the demographic variables like age (X2 = 11.75, P<0.05),
educational qualification ($X^2 -9.41, P<0.05$), monthly income ($X^2 - 7.07, P<0.05$) and relation with patient ($X^2 - 10.57, P<0.05$). Significant association was found between caring behavior and demographic variables like age ($X^2 - 15.66, P<0.005$) and educational qualification ($X^2 - 6.82, P<0.05$).

**Conclusion:**
The research revealed that the caregivers of cervical cancer patients experienced mild level of role strain with predominant concern being the financial aspects. The family involvement in the patient care continues to improve as the caregivers had good caring behaviors with only the knowledge and skill being adequate.

**Awareness and Attitude on Cancer Disease Among Rural Community**
Mr. T. Sivabalan, MSc (N), Asso. Professor, PIMS (DU), College of Nursing, Loni (Bk), Ahmednagar Dist, Maharashtra, Pin: 413736.

**Key wards:** assess, cancer, awareness and attitude.

**ABSTRACT**
Cancer is a major burden worldwide, and more than half of all cancers occur in the developing countries. A substantial proportion of the impact of cancer can be prevented through the application of cancer control knowledge, early detection and treatment. Existing evidence indicates that public awareness on cancer and of warning signs is poor.

**Objectives:**
The study was conducted to (1) assess the awareness and attitude on cancer disease (2) to identify the relationship between awareness and attitude (3) and to find association of awareness and attitude with socio demographic characteristics.

**Material and Methods:**
It’s a community based descriptive cross sectional survey. Participants: a total of 50 rural people who reside in Dahad area, Loni (Bk) village of Ahmednagar Dist, Maharashtra and aged above 18 years had participated. Systematic random sampling technique was used to select the study subjects. Tool: self prepared and pre tested structured questionnaire and rating scale used to gather information on knowledge and attitude on cancer respectively. Statistical analysis: descriptive statistics (mean, SD, mean percent) and inferential statistics (chi square test) were applied wherever required.

**Results:**
The findings of the study shows that overall awareness mean score was (16.84±1.69) which is 67.36% of total score indicates people had average level awareness on ‘cancer disease’ whereas the participants had highest mean percent 73.5% for the area of ‘treatment of cancer’ and lowest mean percent 58% for ‘risk factors of cancer’. However the participants had positive attitude on cancer disease with the mean score of (55.34±2.14) which is 73.7% of total score. There was a significant association found between the awareness and socio demographic characteristics like education and live with cancer patient at $P<0.05$ level.

**Conclusion:**
Study outcome revealed that though the people had positive attitude, their awareness level was minimal. The awareness imports the health seeking behaviors and may control the overwhelmed risk of cancer and other life issues. Thus it is recommended that the health education efforts for cancer risk factors and detection is significant and substantive, hence the health authorities should give priority to community-oriented cancer awareness programmes.

**Role of Biochemical Parameters in Assessment of Demographic Data, Ophthalmic Measurements in Primary open Angle Glaucoma Patients in Rural Population**
Dr. Agte AB1, Dr. Dharwadkar2 & Dr Gaikwad SB3, 1.Ulhas Patil Medical College, Jalgaon (MS). Mo- 9850410343, 2. S B College of Science, Aurangabad (MS), 3. Govt. Medical College, Aurangabad (MS)

**Keywords:** Glaucoma, Primary open angle glaucoma, fasting blood sugar, Intraocular Pressure

**ABSTRACT**
Glaucoma is an eye disease that can cause loss of vision, often called as sneak thief of sight. It is deadly because there are no early warning signs. Glaucoma is a group of disorders that have in common characteristic degeneration of the optic nerve associated with elevated intraocular pressure (IOP). If left untreated can cause absolute irreversible blindness. It is the second highest reason for blindness next to cataract. There are different types of glaucoma; primary open angle glaucoma (POAG) is the most common autosomal dominant disease.

**Aims/Objectives:**
To study the levels of mean LOP, HbA,C in POAG patients & their assessment in diagnosis and prognosis of the disease

**Material & Methods:**
30 Patients from the rural area of Khandesh & Vidharbha Region with age groups from 28-67 yrs having DM & HT since last 3 yrs & undergoing treatment from the same were chosen for the present study. POAG were diagnosed in the Ophthalmology Department & biometrics measures were taken at Dr. Ulhas Patil Medical College, Jalgaon. The Patients were collected from the Ophthalmic Camps organized by Medical College at rural areas of Khandesh & Vidharbha
Region. Routine follow up done on operated patients. The estimation of FBS was done by GOD & POD method & HbA,C by immunoturbidometric assay from tulip. Serum Uric acid was done by method of Caraway.

**Results & Discussion:**
The present study shows elevated levels of mean IOP & HbA,C in POAG patients. Highly significant correlation between IOP, IBG & HbA,C in diabetic with POAG & nondiabetic POAG patients. It is found that hyperglycemia & increase incidence of DM or impaired fasting glucose or glucose tolerance & serum uric acid metabolism in the pathogenesis of POAG patients. An association between chronic hyperglycemia & high glycosylated hemoglobin (HbA,C) & IOP in patients with diabetes & assumed that the increase in IOP is related to the accumulation of fibronectin in trabecular meshwork tissue.

**Conclusion:**
The results of the current study clearly reveal that there are disturbances in carbohydrate metabolism in POAG.

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**Prevalence of Arthritis and Related Factors among Korean Adults**
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**ABSTRACT**
This study was designed to estimate the prevalence of arthritis and to identify subgroups with high prevalence rates of arthritis in South Korea. Study subjects were 18,406 Korean adults aged 19 and more from the 4th (2007-2009) Korea National Health and Nutrition Examination Surveys data. The result was as follows. The crude prevalence of arthritis was 11.7% (osteoarthritis 10.2% and rheumatoid arthritis 1.7%). The prevalence was increased by age strata (2.4% in 19-44 aged, 16.4% in 45-64, 38.3% in 65 and more). After adjusting for age, the subgroups with high prevalence were older people, women, residents in non-apartment area, separated and divorced people, people with low education, people in a type of occupation (agricultural and fishery workers, elementary occupations, and unemployed), people with low household incomes, people with medical aid, and people with higher BMI. Those subgroups may be target populations in community health programs to control the disability from arthritis.

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**The Analysis of Patient Background, Treatment and Prognosis in Women With Ovarian Cancer**
Motohiro Shimizu, Masaki Fujimura, Norihiro Iwasa, Kosei Hasegawa, Shoji Nagao, Keiichi Fujiwara, Kazuo Kawahara Tokyo Medical University Ibaraki Medical Center

**Key words:** ovarian cancer, patient background, treatment, prognosis

**ABSTRACT**
Ovarian cancer does not have the suitable examining method, and when the onset of the disease in an early stage, it is deficient in subjective symptoms. Therefore, most cases are the diseases with a poor prognosis discovered by advanced cancer at the time of the first medical examination.

**Objectives:**
Although the probability of survival has improved by progress in chemotherapy, the long-term probability of survival is still poor. We report the analysis of patient background, treatment and prognosis in women with ovarian cancer.

**Methods:**
We inquired age of onset, disease stage, histological type, treatment (operation, chemotherapy, radiotherapy, etc.) and prognosis retrospectively for 252 treated patients by diagnosis of ovarian carcinoma at the Saitama Medical University hospital and Saitama Medical University International Medical Center from 2003 to 2009.

**Results:**
The median age of onset was 56 years old. The patient's rate were stage 1: 37%, stage 2: 10%, stage 3: 44%, stage 4: 9% in disease stage, and serous adenocarcinoma: 43%, endometrioid adenocarcinoma:16%, mucinous adenocarcinoma: 16%, clear cell adenocarcinoma: 27%, other: 5% in histological type. The 5-year survival rate for patients were stage 1: 91.2%, stage 2: 76.4%, stage 3: 43.5%, stage 4: 20.7%, and 61.7% of the whole. The number of cases of recurrence was 115, and was 46% of the of the whole. The survival period median after recurrence were stage 1: 16.5 months, stage 2: 30 months, stage 3: 12 months, stage 4: 16 months. The average of 8.7 courses of chemotherapies were mainly enforced as recurrence treatment in the meantime.

**Conclusion:**
The advanced ovarian cancer recurs to high rate, and when it suffers from ovarian cancer, it is forced to undergo the medical treatment over a long period of time. It is necessary for medical staff and patients to recognize adequately that this disease is intractable, and medical treatment on recurrence is very difficult.

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**Clinical Study of Cerebrovascular Arterial Dissection in Saku Central Hospital**
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Neurosurgery in Saku Central Hospital

Keywords: Cerebrovascular Arterial Dissection

ABSTRACT

Cerebrovascular arterial dissection (CAD) is seen in Europe and the United States, whereas in our country it is often seen in the intracranial vertebral artery.

Aims/Objectives:

We retrospectively reviewed the medical records of CAD patients who were admitted to our hospital.

Material & Methods:

There were 44 cases of CAD (43 vertebrobasilar artery dissections and 1 anterior cerebral artery dissection) in our hospital between 2000 January and 2012 May. 22 cases (M/F=13/9 average 58.1y) were in subarachnoid hemorrhage(SAH) group and 9 cases of them were treated with trapping, 3 cases with trapping + bypass, 3 cases with coil embolization, 6 cases conservatively. 18 cases (M/F=13/5 average 51.6y) were in ischemic group and all cases were treated with medical treatment. 4 cases (M/F=2/2 average 52.5y) were in trigger headache group and 2 cases were treated with trapping because follow up 3D-CT angiography revealed glowing lesions and other cases conservatively.

Results & Discussion:

Outcomes were assessed using the Glasgow Outcome Scales (GOS). There were 10 GR, 4 MD, 2 SD and 6D in SAH group. Dead cases were due to rebleeding. There were 15 GR, 4 MD, 1 SD and 1 D in ischemic group. 62y/o male in ischemic group was dead because of SAH after 14 days from initial ischemic attack. There were 3 GR and 1 MD in trigger headache group.

Conclusions:

Vertebrobasilar artery was the most frequent lesion of CAD in our hospital. Our optimum treatment for SAH is emergency operation, whereas for ischemic attack is medical treatment. Dissective lesions were changeable, so it is very important to make frequent inspection images, such as MRA or 3D-CT angiography.

Profile of Breast Cancer Patients Attending Cancer Hospital- in North Karnataka: A Cross Sectional Study

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Keywords: Breast Cancer, Risk Factors, Cancer Profile

ABSTRACT

In today’s world, breast cancer is considered a modern epidemic and is the 2nd largest noncommunicable disease. Breast cancer is the 2nd most common cancer among women in India, after cervical cancer.

Aims/Objectives:

To know the profile of breast cancer according to age, site and side and identifying the probable risk factors, various clinical presentation and management strategies adopted/suggested for various breast cancers by surgeons/physicians.

Material & Methods:

Its a cross sectional study. Convenience sampling method used. The sample size was 280. Pre-designed, pre-tested questionnaire was used. Data was expressed as figures and %.

Results & Discussion:

Majority (77.85%) of the patients in the study population belonged to 5th and 6th decade of life with incidence more on the left side (50%). Lump was a dominant symptom (44.65%), where (55.36%) of the patients had lump in upper outer quadrant. (71.07%) of them gave duration of symptoms >3 months. Screening by mammography, bone scan, CT and MRI were sparsely used. The most common histology variant was infiltrating duct carcinoma. FNAC was most common diagnostic modality used and MRM was the most common treatment modality used. Risk factors such as early menarche 11 years, BMI (overweight, obese), lower socioeconomic status all attributed to the higher incidence of breast carcinoma.

Conclusion:

Most patients in our set up are unable to afford mammography due to their poor socioeconomic background. Thus there is a need for developing other cost-effective screening modalities for breast cancer in addition to breast self-examination in masses, for early detection. Although BCS is popular worldwide, MRM still remains the gold standard for the management of breast cancer in the present circumstances, in most parts of India. In view of the rising incidence and the prevailing controversies in its management, it is recommended that they should preferably be managed by surgical oncologists for improvement in the patient's outcome.

Measurement of Illness Perception among Rural Hypertensive Patient’s in Pune district, India.

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Key words: hypertension, perception, adherence, rural
ABSTRACT
Prevalence of hypertension, which is a major risk factor for cardiovascular diseases, is increasing exponentially in India. Reported prevalence of rural areas is 15.7% in India. Studies have suggested that patient’s characteristics, co-morbidities, beliefs, attitude affect adherence to the medication.

Objectives:
This study aims at measuring illness perception and its association with medication adherence among rural hypertensive patients.

Materials and Methods:
This is a cross sectional study of 311 patients recruited from public and private healthcare facilities in Kamshet PHC area, Pune district, Maharashtra. Data, using Brief Illness Perception questionnaire (BIPQ), Morisky medication adherence scale (8-item) and socio demographic information was collected. Chi-square for association, means and standard deviation and bivariate analysis of components of BIPQ were computed using SPSS 19 software.

Results:
Mean age of diagnosis was 51.73 (±10.4) years with 5.5 years mean duration since diagnosed with hypertension. Various components of illness perception were measured on a scale of 1 to 10. Understanding of the illness was fair (mean 4.4) and was considered as a disease with long duration (mean 8.3). Increased frequency of symptoms led to rise in ‘concern’ (r=0.35) about the illness which further led to emotional disturbance (r=0.31). Increased frequency of symptoms also led to more ‘threatening’ views about consequences (r=0.31). Those showing more ‘personal control’ over the illness reported more positive effect of medication on their illness(r=0.48). Thirty six percent were highly adherent and those below 58years were more (p=0.02) adherent.

Conclusion:
Though symptom identification and chronicity of the disease was rightly perceived, medication adherence was much low. Low adherence was probably mediated by several factors. Rural patients lack appropriate knowledge of the illness, role of medicine hence had very low personal control over illness. Need for patient counseling, support to increase adherence and health education pertaining to cardiovascular disease is highly recommended.

Knowledge and Attitudes on Anti Tobacco Measures Imposed Under ‘The Cigarettes and other Tobacco Products Act 2003’ Among Rural Men in Northern India
Dr Nabeel Ahmed, Dr Abhishek Singh, Dr Sk Ahluwalia, MM Institute of Medical Sciences, Mullna

Keywords: KAP Study, Tobacco Control Measures, Adults.

ABSTRACT
Tobacco is the most important preventable cause of death and disease among adults. In 2003, The Central Government passed the Cigarettes and Other Tobacco Products Act (COTPA) applicable to all tobacco products. Public awareness of the ban on smoking in public places was very low and as a result, there were widespread violations.

Aims/Objectives:
To assess prevalence of smoking and to assess the knowledge and attitude of men towards anti tobacco measures imposed under cigarette and other tobacco products act 2003.

Material & Methods:
The present cross sectional study was carried out in the rural field practice area of the department of community medicine, MMIMSR, Mullana among men aged 18 years for a period of 6 months from July to December using pretested self-administered questionnaire. Responses of 714 men were included in the study. Data was analyzed using SPSS and valid conclusions were drawn.

Results & Discussion:
The prevalence of smoking was 39.7% and among them 77.8% were regular smokers. The prevalence of smokeless tobacco was 32.4%. There was a biphasic trend in age and smoking pattern. 94.2% of the study population were aware of the COTPA 2003, 91.2% were aware of prohibition of smoking in public place and 78.0% knew the age limit below which sale of tobacco products was banned. 27.8% of smokers were reported that their smoking habit got reduced to some extent because of the act, 3% reported that they had totally quit smoking but majority (69.2%) of them reported that act didn’t had any impact on their smoking habit.

Conclusion:
Preventive steps like behavioural change communication, fiscal measures and further more strong enforcement of the act are needed in order to achieve desired results of COTPA act.

Assessment of Knowledge, Attitude and Practice regarding Tobacco use among Pre-university students of rural area - A cross sectional study.
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ABSTRACT
Smoking and tobacco use is a major public health issue in developing countries. The most susceptible age for initiating tobacco use in India is adolescence and early adulthood; this in long run will have influence on health in the later years of life. It is important to understand various factors that influence and encourage teenagers to start smoking or to use other tobacco products.

Objective:
To know the knowledge, attitude and practice regarding tobacco use among pre-university students in rural area.

Material & Methods:
A cross sectional study was conducted among students of pre-university college at Handiganur village of Belgaum taluka after obtaining the permission from the head of the institute. 163 students who were resident of the rural area were included in the study. The knowledge, attitude and practice of tobacco use were assessed using a pre-designed, semi-structured questionnaire. The results obtained were expressed in percentages and analyzed.

Results & Discussion:
Among the participants, 54% (88) were boys and 46% (75) were girls; with a mean age of 17.6 years. Stress was cited as the most common (54.6%) initiating factor to use tobacco. 82.8% (135) knew regarding products containing tobacco. Cancer was the only harmful effect known to them. 96% of them opined for the prohibition of smoking in public places. None of them knew about passive smoking. Consumption of tobacco was found in 11.6% (19) of which all of them were boys; who were influenced predominantly by their parents.

Conclusion:
Though the students knew that tobacco is harmful, their knowledge regarding specific effects and passive smoking was not satisfactory. The need of the hour is to target and focus interventions through comprehensive programs aimed at institutions, parents and individual level.

Clinico-Social Profile of Patients with End Stage Renal Disease in A Tertiary Care Center of Rural Kerala, India
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Keywords: End Stage Renal Disease

ABSTRACT
End Stage Renal Disease (ESRD) is a devastating medical, social and economic problem for patients and their families. A prospective study involving 48 hospitals distributed all over India showed the leading causes for ESRD as diabetes (29.7%), chronic glomerulonephritis (19.3%) and hypertension (14%). As diabetes and hypertension are so rampant in Kerala, we planned a study on patients undergoing Hemodialysis in a tertiary care center situated in rural area of Kerala.

Aims/Objectives:
To study the Clinico-social profile of patients with End Stage Renal Disease in a tertiary care center of rural Kerala, India

Material & Methods:
Study Design- Hospital-based Descriptive study
Study Population- All patients with End Stage Renal Disease undergoing hemodialysis in the Dialysis unit of Pariyaram Medical College, Kannur, during the period of January 2012 to July 2012
Data Collection method- Pre -tested questionnaire, Clinical examination and Laboratory investigations.

Results & Discussion:
A total of 154 patients with ESRD participated in the study, of which 107(69.5%) are males and 47(30.5%) are females. Mean age of patients is 50.3 years (SD 14.1). Mean age of onset of ESRD is 46.1 years (SD 14.78). Family history of ESRD in a first degree or second degree relative is present in 16 (10.4%) patients. Cause for ESRD are Diabetic-nephropathy in 57 (37%), Hypertensive-nephropathy in 39 (25.3%), Chronic-Glomerulonephritis in 11 (7.1%), Polycystic-kidney disease in 4 (2.6%), IgA-Nephropathy 4 (2.6%), other causes 8 (5.2%) and Unknown Causes 27 (17.5%). Prevalence of Hepatitis-B is 1.3% and Hepatitis-C is 5.2% among the patients. Prevalence of Diabetes is 40.9% and Hypertension is 90.0%. Mean monthly cost incurred for treatment is Rs.15720 (SD 4070).

Conclusion:
The major causes of ESRD are similar to other hospital-based studies in India. The study suggests the need of early intervention in Diabetes and Hypertension.

Incidence of HIV infection among rural population attending ICTC Centre, Rural Medical College, Lon, Ahmednagar, Maharashtra.
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ABSTRACT
HIV infection / AIDS is increasing at an alarming rate globally. It has now become a major challenge and threat to public health. Promising development has been in recent years in global efforts to address the AIDS epidemic, including increased access to effective treatment and prevention programmes. However, many studies have been conducted to show the incidence of HIV infection in urban areas but there are very few reports of incidence of HIV infection in rural population of India. Hence the study was undertaken to know the prevalence of HIV infection among patients attending ICHTC, Rural Medical College, Loni, Ahamadnagar.

Materials and methods:
This is a retrospective study from April 2008 to March 2012 carried out at ICHTC centre, Rural Medical College, Loni, Ahamadnagar. A total 6783 volunteers and 13327 ANC cases, who have attended ICHTC centre, have been included in this study.

Results:
Out of 6783 volunteers, 426 were found to be HIV seropositive and out of total 13327 ANC cases, 0.36% were HIV seropositive. 0.5% out of 6783 volunteers had coinfection with Tuberculosis. Year, sex and age wise distribution were also studied. In last 4 years male to female ratio is 1.27:1. Maximum seropositivity i.e. 33.5% was found in the age group of 31-40.

Conclusion:
In last 4 years we observed yearly gradual decrease in the incidence of HIV infection.

Co-infection of HIV and Intestinal Parasites in Rural Population of Loni, Western Maharashtra, India
Santosh Saini, Namita A.Raytekar, Sachin Deorukhkar.
Keywords: HIV, Intestinal parasites, Protozoa, Co-infection.

ABSTRACT
Intestinal parasite infections are among the most serious causes of illness and disease of socially and economically disadvantaged populations in developing countries, including rural areas of India. In case of human immunodeficiency virus (HIV) infected individuals due to the impairment of immune status, there is ample scope for co-infections and there have been increasing fears about their effects. However, hardly any relevant epidemiological studies have been carried out in the country. The aim of the present survey was to assess the Intestinal parasitic infection status among a representative sample of HIVpositive patient in Loni, rural area of Western Maharashtra, India and compare the findings with those from a cohort of non-infected individuals.

Methods:
A case control study was carried out at Department of Microbiology, Rural Medical College, Loni, India, between September 2010 and August 2011 among consecutively enrolled 177 individuals (HIV positive and HIV negative) presenting with and without diarrhoea. Stool samples of all participants were examined for the presence of intestinal parasites by direct microscopy and Modified Zeihl-Neelsonstaning method. Blood examination was performed for the HIV infection detection.

Results:
A total of 177 individuals stool sample was examined. Among 117 individuals, 63 were HIV positive and 114 HIV negative. The overall prevalence of intestinal parasites was 17.5% (31 cases) among the study subject of 31 cases where parasites detected in total, Entamoebahistolytica 15 (48.38 %) was found to be most prevalent parasite found in the study population. Cryptosporidium spp. infections were significantly more prevalent among HIV positives (35.71%). The prevalence of parasitic infections among HIV positives was 22.2% while the rate was 14.91% among HIV negatives. The prevalence of intestinal parasitic infection was higher among HIV positive participants. The presence of parasite was also correlated with CD4 T cell count and it was found that the occurrenceof Cryptosporidium spp. higher in patients with CD4 count < 200 cells/il.

Conclusions:
HIV positive individuals are more susceptible to co-infections especially with Cryptosporidium spp. Detection of aetiologic pathogens might help clinicians to decide appropriate management strategies thereby to reduce morbidity and mortality due to intestinal parasitic infections

Non Communicable Disease: Part – II
High Resolution Computed Tomography in Chronic Obstructive Pulmonary Disease Patients with Phenotyping
Dr. Dayanand Shetty Dr.Pande Satish, Dr.Tambe Sajid, Dr.Kori Smita, Dr.Kajale Shilpa, Shri Sai Baba Rural Hospital
Keywords: Hrct Copd Phenotypes

ABSTRACT

COPD is a disease state characterized by airflow limitation that is not fully reversible. This disease complex includes chronic bronchitis, pulmonary emphysema and asthma. Emphysema classification: Centrilobular emphysema, paraseptal emphysema and panlobular emphysema. Phenotypes of COPD were classified based on emphysematous changes and bronchial wall thickening. Phenotype A- Absence of emphysema or with little emphysema with or without bronchial wall thickening. Phenotype E- Emphysema without bronchial wall thickening. Phenotype MEmphysema with bronchial wall thickening. We have followed these criteria for classification of COPD in phenotypes.

Aims/Objectives:
1. Document the spectrum of HRCT chest findings in COPD patients. 2. Assess the types of emphysema. 3. Quantify the emphysema in lungs. 4. Classify the COPD patients into various phenotypes based on HRCT chest findings. 5. Document the HRCT findings in various phenotypes and correlate with smoking, biomass fuel exposure and pulmonary function tests.

Material & Methods:
54 COPD patients were studied. Clinical history of smoking, occupation and biomass fuel exposure was obtained. A. Helical HRCT chest was performed. Types of emphysema were documented. Wall thickness of lobar bronchi was measured. B. Quantification of emphysema was done with software package and phenotypes (A, E and M) were classified.

Results & Discussion:
1. Males were predominant than females. 2. HRCT spectrum includes 7 different subtypes of emphysema. 3. Centrilobular emphysema was dominant followed by panlobular and paraseptal emphysema. 4. All patients showed bilateral lung emphysema. 33 patients showed < 10 % involvement and 21 patients showed > 10 % involvement of both lungs. 5. Males showed higher percentage emphysema in lungs. 6. Bronchial wall thickening was present in 37 patients. 7. Phenotype A was dominant followed by phenotype M and phenotype E 8. Males were predominant in phenotype A, M and females in phenotype E. 9. Significant correlation was observed between percentage emphysema of lungs with PFT. 10. Phenotype M represents severe COPD. 11. Significant correlation was seen between COPD phenotypes and biomassfuel exposure.

Conclusion:
• Males (64.8 %) were predominant.
• The HRCT seven different subtypes are, only centrilobular emphysema (29.6 %), only panlobular emphysema (22.2 %), only paraseptal emphysema (1.85 %), centrilobular with paraseptal emphysema (22.2 %), centrilobular with panlobular emphysema (7.4 %), panlobular with paraseptal emphysema (1.85 %) and all three types of emphysema (14.8 %). • Centrilobular emphysema group was dominant (64.1 %). • Males showed higher percentage emphysema (12.53 %). • Bronchial wall thickening was present in 68.5 % patients. • Phenotype A was dominant (61.1 %).
• Males were predominant in phenotype A and phenotype M. Phenotype E showed only females. • Percentage emphysema was significantly associated with FEV1 % predicted (R =0.4907 and p = 0.0002) and FEV1 / FVC (R = 0.7176 and p < 0.0001). • Phenotype M showed severe reduction in FEV1 % predicted and FEV1 / FVC than phenotype A and phenotype E. • COPD phenotypes were significantly associated with biomass fuel exposure (Chi square = 11.29 and p = 0.0035).

Screening for Diabetes Mellitus, a Non Communicable Disease (NCD), in a the Rural Area in India

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ABSTRACT

It is well known that Diabetes Mellitus (DM) is a disease with an increasing prevalence around the world, especially in India and in the urban areas – whereas the change in life style is supposed to be one of the most important factors. Many studies have been done in the urban areas but at 2009 when this study was planned very little were known about the prevalence of diabetes mellitus in the rural areas in India, at least in the state of Maharashtra. There were a common thought that the poor people on the countryside had a healthier lifestyle than the people in the urban areas. For example there was no existing program for prevention for work for people at a risk for getting the disease or for taking care of people with diabetes mellitus. Therefore a screening program for DM was started at January 2011.

Methodology

An already organized camp based strategy was adopted in the study. The Rural Medical Colleges (RMC) in Loni, Maharashtra, organizes multidiasnostic and minicamps regularly approximately once a month in an area of 70 km. The study was conducted from January 2011 until December 2011 in total 12 camps. Capillary blood sugar was measured
with a glucometer (Accucheck – Aviva) randomly as well as weight, height and blood pressure. The population catered by all the villages approximately accounted at 1.80.000 and the population which attended to the camps accounted at 3000. Systemic Random sampling technique was used and every 5th person registered at the counter was enrolled as the participant, out of the eligible population which resulted in a study population of 591 individuals.

**Results**

- 51 % of the study population where older than 60 years of age
- 58 % were malnourished on basis of Asian BMI so almost half of the population were undernourished.
- Prevalence of DM estimated 7 % with a male predominance
- Systolic hypertension and diastolic hypertension was observed at approximately 24% and 15% respectively
- Mild systolic hypertension was predominant in males in contrast to moderate diastolic hypertension in females
- Totally 42 diabetics was found in the study with blood glucose above 200 mg/dl randomly, were almost 12 % were in the age between 20 and 40 years old,
- Age was statistically significant correlated to BMI, Blood Sugar Levels (BSL), Systolic Blood Pressure (SBP) as well as Diastolic Blood Pressure (DBP)
- BMI was statistically significant correlated to BSL, SBP and DBP which was expected
- BSL was also strongly correlated to SBP and DBP.

**Conclusion**

The prevalence of DM (7%) was higher than expected according to earlier studies of the prevalence of DM in the rural areas with dominance of malnutrition. The expected prevalence was approximately 4% which shows that the prevalence in the rural areas are almost at the same level as in the urban areas which means that the risk of macro and micro angiopathic complications are supposed to be at the same level as in the urban areas. Although the awareness of the risk of complications is lower among the rural habitants and therefore a more severe problem together with the difficulties to reach the rural people with preventative actions. So the organization for preventive work has to be build up as well as the amount of diabetic clinics. This screening study in the rural area shows that the problem with Diabetes Mellitus has to be taken as serious as it is in the urban areas. Poverty with following malnutrition do not protect people from getting Diabetes Mellitus. Much effort has to be undertaken in this subject.

**Assessment of Knowledge, Attitude and Practice of Electronic Cigarette Users in Pune City and Chemical Evaluation Of E-Cigarette Cartridge. - An Observational Study.**

Dr. Sushil Anil Phansopkar, Dr. Sahana Hegde Shetiya ; Dr.Simpy Mahuli ; Dr.Amit Mahuli ; Dr.Arishka Patil ; Dr.Deepti Agarwal. Dept. Of Public Health Dentistry, Dr.D.Y.Patil Dental College and Hospital, Pimpri, Maharashtra, India.

**Keywords:** Smoking Cessation, Electronic cigarettes, nicotine,

**ABSTRACT**

An electronic cigarette (e-cigarette) is commonly used as an alternative for the smoked tobacco and is being promoted as a nicotine replacement therapy (NRT) by the companies.

**Aims/Objectives:**

1. Assessment of knowledge, attitude and practise of electronic cigarette users in Pune city.
2. To assess the socio demographic variables of e-cigarette users.

**Material & Methods:**

A 6 month observational study amongst e-cigarette users in Pune city was conducted. The demographic details were recorded and a 23 item questionnaire was provided. Chemical analysis of e-cigarette cartridge was done using Gas Chromatography and Mass Spectrometry (GC-MS). Snow ball sampling technique was used. Informed consent and ethical clearance was obtained.

**Results & Discussion:**

80% of the study participants had a good knowledge regarding E-cigarettes. Most of the users felt that there are no health risks with e-cigarettes but all of them felt the need to participate in tobacco cessation programmes.

**Conclusion:**

Although e-cigarette has just been introduced in the Indian market yet its knowledge among the users is good and the attitude towards it is also positive.

**Oral Health Promotion Through Schools in India - Need or Want??**

Dr.Saurabh P.Kakade, Dr.Sahana Hegde-Shetiya, Dr.Pradnya Kakodkar, Dr.Ravi Shirahatti, Dr.Deepti Agrawal, Dept. Of Public Health Dentistry, Dr.D.Y.Patil Dental College And Hospital, Pimpri, Maharashtra, India.

**Keywords:** Schools, Oral Health, India
ABSTRACT
Oral Health, part of the school health services helps, screen, prevent, control and monitor oral diseases and conditions and maintain good oral health. The present scenario of our country, need arises to develop oral health services in schools with an attempt needed to develop an accessible and sustainable module for prevention of oral health diseases among school children using existing educational infrastructure and to find out the feasibility of such a primary preventive module for prevention of oral health diseases in school children of Pune city and in Baramati taluka of pune district by knowing the existing situation.

Aims/Objectives:
To evaluate oral health services, oral health education and healthy school living in Primary Schools of Pune City and Baramati Taluka.

Material & Methods:
Questionnaire study has been conducted in about 10 percent of all primary schools (private and government) from Pune City and Baramati Taluka were selected through random sampling technique using Microsoft Excel 2007. One questionnaire each being given to a principal, teacher and a parent in the local language.

Results & Discussion:
Few private schools had better facilities for oral health promotion than the government schools. The urban/ rural disparities do exist. The government has taken initiative in general health but firm steps are needed in case of definitive school oral health programs. Majority of the participants wanted to have school based oral health program that included screening, education and treatment. Parents want to play a supportive role but wanted firm steps from government authority. In future state wide or a national survey can be carried involving representative population of teachers and parents of all schools.

Conclusion:
Huge gap exists in school based oral health programs in urban as well as rural areas. Intersectoral co-ordination can probably help solve the problem.

Substance Use Among High School Students of Rural Bhopal, Madhya Pradesh, India
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Keywords: Tobacco, Alcohol, Students, Drugs

ABSTRACT
Use of tobacco products, alcohol and illicit drugs by adolescents is a matter of concern world-wide. The epidemic of substance abuse in young generation has assumed alarming dimensions in India. However there is no published report on substance use among rural adolescents from Madhya Pradesh state, India.

Aims/Objectives:
To assess (1) Prevalence (2) Pattern (3) Associated factors of substance use among high school students of rural Bhopal, Madhya Pradesh, India.

Material & Methods:
The present cross sectional study was conducted among high school students of rural Bhopal Madhya Pradesh, India. Modified WHO-recommended methodology for student drug use surveys was used in the present study. Information about age, gender, class, substance use, type of the family, education level of the parents, substance use by parents and siblings; religion was collected with a self-administered questionnaire in local language (Hindi). Data was statistically analyzed using Chisquare test, Students’ t-test and multiple logistic regression tests. P values <0.05 were considered statistically significant.

Results & Discussion:
Questionnaire was administered to 987 students. Age range of students was 15 to 20 years. 52.07% of the participants reported having used any substance at least once in their lifetime. Percentage of substance user was increased with age. Percentages of males were higher than females. Most commonly used substance was tobacco, followed by alcohol. Use of substance by parents and siblings had a significant impact on participants. Enjoyment and curiosity were found to have the major influence in their decision to use a substance.

Conclusion:
Findings of present study show a high prevalence of substance use among high school students of rural Bhopal, Madhya Pradesh. For the benefit of future generation there is a need to frame school based substance prevention policy and programs involving students, teachers and parents. Also, legislative actions should be more stringent.

A Rural Population Based Epidemiological Study on Prevalence of Oral Cancer and Associated Risk Factors in Hassan District, Karnataka
Dr.Sundar.M, Dr.Jagadeesh.C.N, Dr.Venkatesh.G.M, Dr.Praveen.G, Dr.Siddharam.S, professor and HOD, Dept. of
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**Key words:** Oral cancer, prevalence, risk factors, epidemiology

**ABSTRACT**

Among Non-Communicable Diseases (NCD’s), cancer is one of the leading causes of mortality worldwide including India. India is contributing around 8% of all estimated global cancer and about 6% of all deaths. Considering various types of cancer, oral cancer due to tobacco smoking and other risk factors forms the most predominant especially in lower and middle income countries. With regard to epidemiological data, other than that obtained routinely through cancer registries, very limited population based data is available from rural areas. Hence this study was taken up in rural areas of Hassan district of Karnataka to find out the magnitude of oral cancer and associated risk factors.

**Objectives:**

To find the prevalence of precancerous lesions of oral cancer, risk factors and its association.

**Methodology:**

A community based cross-sectional study was done to find the prevalence of precancerous lesions and associated risk factors in three Primary Health Centers (PHC’s) regions of Hassan district. Through a simple random selection, 30 villages were included from above said 3 PHC’s for survey.

**Results:**

Around 1220 households (27.97%) were contacted for the study purposes. Among them, 1552 were study subjects consisting of males-793 (51%) and 759 (48.90%) were females. More than 35 yrs of age were 751 and 750 males and females respectively. Majority, (1398) 90% study subjects were having chewing, smoking and alcohol habits. 109 (7.02%) were having precancerous lesions such as leukoplakia (71.56%) and OSMF (14.68%). Majority of Lesions were found in illiterate females (72%). A well established risk factor association with cancer lesions was found in the study.

**Conclusions:**

With reference to objectives of the study, the prevalence of various risk factors for oral cancer and association were found in the study.

**Expression of P53 Gene in Induced Lung Carcinoma Treated with Combination Therapy**

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**Keywords:** Small-Cell Lung Cancer, Benzo(A)Pyrene,Cyclo Phosphamide And Rutin

**ABSTRACT**

Lung cancer is the most common cancer in the world with 1.3 million new cases diagnosed every year. Majority of lung cancers are caused by cigarette smoking. The link between tobacco and cancer was established more than 50 years ago. Smoking causes almost 90percent of lung cancer deaths. Lung cancer was the most frequently occurring cancer in the developing as well as developed countries. The disease has a poor prognosis and, with an increase in deaths each year, it is still the most common cause of cancer death in the world. There are two main categories of lung cancer around 20% are small-cell lung cancers (SCLC) and the remainder are non-small cell lung cancers (NSCLC). The main types of NSCLC are squamous cell carcinoma, adenocarcinoma and large cell carcinoma, which account for approximately 35%, 27% and 10% respectively of all lung cancer. While cigarette smoking has been linked to all four types, adenocarcinoma is the most common type in non-smokers. and a rise in incidence has been reported in the USA and other countries. The increased incidence of adenocarcinoma has been linked to low-tar cigarettes. In the USA adenocarcinoma is now the most common type of lung cancer Incidence rates for lung cancer vary hugely between different regions of the world. The highest rates of lung cancer in men are found in Europe, especially central and eastern Europe, and northern America.

Benzo(a)pyrene Benzo(a)pyrene diol epoxide (BPDE), an active metabolite of the tobacco Carcinogen benzo(a)pyrene, can induce p53 gene mutation, downregulate retinoic acid receptor, and increase cyclooxygenase-2 expression in human epithelial cells. Tobacco is recognized as an important cause of human cancer. It contains at least 2,550 known compounds, more than 40 of which have been found to be carcinogenic in animals. These carcinogens are believed to induce DNA adducts and then cause gene mutation, deletion, or DNA methylation in target organs. Cells with damaged DNA may be removed by apoptosis. Alternatively, if a permanent mutation occurs in critical region, an oncogene may be activated, or a tumor suppressor gene may be deactivated. Multiple events of this type lead to aberrant cells with loss of normal growth control and, ultimately, to cancer. Cyclophosphamide and rutin Flavonoids are now recognized as possessing antiallergic, anti-inflammatory, antiviral, antiproliferative and anticarcinogenic activities as well as affecting some aspects of mammalian metabolism. Interest in these substances, primarily considered as plant pigments, has arisen because of possible effects on human health. The very long association of plant flavonoids with various animal species and other or ganisms throughout evolution may account for the extraordinary range of biochemical and pharmacological activities of these chemicals in mammalian and other cell systems. Cancer treatment with DNA alkylating agents, such as cyclophosphamide (CPA),can lead to nephrotoxicity. CPA is widely used in the treatment of malignant neoplasms and some autoimmune diseases, including rheumatoid arthritis and systemic lupus erythematosus.

**Aims/Objectives:**
To analyse the effect of rutin an antioxidant with the chemotherapeutic drug cyclophosphamide during chemotherapy in induced lung carcinoma in rats.

**Material & Methods:**
Group I Control animals treated with corn oil (vehicle) orally. Group II Animals were induced with lung carcinoma by treating with bap (.2mg/2ml by pulmonary injection fortnightly for 4 times) Group III Lung carcinoma bearing animals treated with Cyclophosphamide (10 mg/kg body weight i.p.) twice a week for 2 successive weeks Group IV Lung carcinoma bearing animals treated with Cyclophosphamide (10 mg/kg body weight i.p.) twice a week for 2 successive weeks along with Rutin (100mg/kg body weight in diet) daily for 2 successive weeks. Group V Animals treated with Rutin alone (100 mg/kg bodyweight) daily for 2 successive weeks.

**Results & Discussion:**
There was significant difference in the level of expression of p53 between the control and group II. The expression of p53 in gp II found to be less when compared with group I,III,IV and V.

**Conclusion:**
It is concluded that by combination therapy of chemotheraphy drug with an antioxidant was effective in regulating the expression of p53.

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**Tobacco Use Among Adults in A Rural Area of Coastal Karnataka**
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**Keywords:** Tobacco Use, Rural Area,

**ABSTRACT**
India is the second largest producer of tobacco and it is widely used in variety of forms. Tobacco causes serious damage to human health leads to high healthcare costs. Productivity is lost due to tobacco-related illnesses and leads to premature deaths. In recent years tobacco control activities are considered as a priority in India and abroad. Therefore the present study was undertaken to gain insight into the problem in order to strengthen the tobacco control activities in Coastal Karnataka.

**Aims/Objectives:**
1. To study the knowledge, attitude and practice of tobacco usage
2. To determine the prevalence of tobacco usage in the community.
3. To study the source of information of harmful effects of tobacco usage.

**Material & Methods:**
**Study design:** Cross sectional study
**Study period:** April-May 2012.
**Study area:** Rural field practise area of Dept of Community Medicine. A pretested and predesigned questionnaire was used to collect data. The questionnaire contained both open ended and closed ended questions. The study variables included: Sociodemographic characteristics, Knowledge about the different forms of tobacco, harmful effects and laws regarding tobacco sale, usage of tobacco and attitude towards usage of tobacco. Data analysis: Statistical Package for Social Sciences 14 was used to analyse the compiled data.

**Results & Discussion:**
A total of 223 (139 male and 84 female) adult subjects were approached. 31.1% of the surveyed population belonged to the age group of 18 – 29 yrs., 34.5% to 30 – 44 yrs., 22% to 45 – 59 yrs. and 11.7% to >60yrs. Majority of the surveyed population was literate and educated. Majority of the people were aware that tobacco has harmful effects (89.7%). The main sources of information were TV (65.4%), Friends (50.7%), Newspaper (47.8%) and Doctors (24.9%). Out of the surveyed population, 34.5% were tobacco consumers out of which 88.3% were males and 11.7% were females. 74.6% of current consumers were keen on quitting tobacco. Main reason for quitting was because of the knowledge of harm to health (41.3%).

**Conclusion:**
One third of the surveyed population were tobacco users, although majority of them were aware of its harmful effects. Three fourth of these users intend to quit tobacco. There is a need to convert the knowledge into practice by health education and support services like tobacco cessation clinic.

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**Study of Prevalence of Diabetes and its Associated Risk Factors in Tribal Area**
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**Keywords** Prevalence,Who Step Approach

**ABSTRACT**
Diabetes Mellitus is one of the foremost preventable non-communicable diseases, so strategies formulated based on the risk factors can be helpful to curb the rising trend of Diabetes Mellitus. There are studies conducted in rural areas of India
but none mentioning the tribal composition of the population and very few studies are conducted in tribal areas.

**Aims/Objectives:**

**Aim:** To study the prevalence of diabetes and the risk factors associated with it using WHO STEP wise approach.

**Objectives:**

1. To find out the prevalence of risk factors for diabetes
2. To find out the prevalence of diabetes
3. To find out the association of diabetes with socio demographic factors & various risk factors.

**Material & Methods:**

The study design was cross sectional Sample size (n) = 330 considering 5% dropout using open epi software individuals between age group of 25-64 were selected using systematic random sampling.

**Results & Discussion:**

The study sample was 342 with 175 (51.2%) tribes & 167 (48.8%) non-tribal population. The prevalence of diabetes in the study area was found to be 3.8% while that of obesity, abdominal obesity & hypertension was 6.4%, 16.1% & 20.8% respectively. The risk factors found associated with diabetes in this study were obesity, low physical activity, higher age & economic status with higher age & certain occupations associated with low physical activity while higher economic status with obesity.

**Conclusion:**

Prevalence of diabetes though much smaller than most of the recent studies in rural India; it represents the spread of epidemic of diabetes even in remote & tribal areas. Similar prevalence in tribes than non-tribes means equal efforts are required even in tribal population to prevent the emerging epidemic of diabetes mellitus.

**Rural-Urban Differentials in Prevalence of Noncommunicable Disease Among Women: Insights From NFHS-3**

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**Keywords:** Women, Rural-Urban, Noncommunicable Diseases

**ABSTRACT**

Epidemiological transition in India has led to the double burden of diseases with surging prevalence of non-communicable diseases. Unlike men, research on noncommunicable diseases among women have remained less focused mainly because these diseases are often associated to life style and women lifestyle has been assumed to be less variant and dynamic. Few studies have shown growing incidences of non-communucable diseases among women too. There is a need to understand the rural-urban differentials in the prevalence of non-communicable disease among women in India.

**Aims/Objectives:**

To assess the differentials in the prevalence of selected non-communicable disease among rural and urban women

**Material & Methods:**

The study has used data from third round of National Family Health Survey conducted in 2005-06. Appropriate bivariate and multivariate analysis have been carried on a sample of is 40,817 and 83,568 for urban and rural women. The noncommunicable diseases taken into consideration are the prevalence of diabetes, asthma and goiter.

**Results & Discussion:**

Findings reveal that the prevalence of diabetes and goiter is more than double among urban women as compared to rural women; however with regard to asthma, the prevalence is higher for rural women though there is not much difference. This brings into light that though urban women are more prone to non-communicable diseases, rural women are also not left untouched by such lifestyle diseases. The higher prevalence of asthma among rural women points to the socioeconomic and environmental factors such as more use of chullas than cooking gas for cooking food etc.

**Conclusion:**

The study has clearly reflected that the prevalence of non-communicable diseases is much higher among urban women still the prevalence is not less for rural women. There is a need to improve the living conditions and lifestyle of women residing in urban as well as rural areas in order to improve the health status and conditions of women.

**Prevalence and Factors Influencing Depression Among Elderly in an Urban Community**

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**Key-words:** Depression, Geriatric, Literacy, Substance abuse.

**ABSTRACT**

With the demographic transition resulting in an increase in the proportion of elderly people, there is an increase in depression among the elderly which is likely to be a major public health problem in the future.
Objectives:
1. To assess the prevalence of depression in elderly using the Geriatric Depression Scale (GDS).
2. To determine the factors influencing depression and recommend preventive measures.

Material and methods:
A Community Based Cross Sectional Study was done for 6 months in the urban slums, field practice area attached to Community Medicine, SDMCMSH. Persons aged ≥60 years residing in the urban slums were included. Those with any psychiatric morbidity and without consent were excluded. A pre-designed, pre-tested proforma was used to collect information. GDS was used to assess depression. Data was analyzed by descriptive statistics.

Results:
Prevalence of depression was 29.36%. Females (31.39%) were more affected than males (25.93%). 70.31% among illiterates were depressed compared to 29.69% literates. 64.06% among those not working, 60.93% elderly belonging to low socioeconomic status and 54.69% indulging in substance abuse were depressed. 76.56% physically inactive subjects were suffering from depression compared to 53.25% physically active subjects who were not depressed ($\chi^2=16.27$, df=1, p<0.0001, highly significant). Depression was significantly higher among those who lacked adequate sleep (82.81%) compared to 54.55% who had adequate sleep without depression ($\chi^2=25.66$, df=1, p<0.0001, highly significant).

Conclusions:
Geriatric depression is highly prevalent. This emphasizes the urgent need for large scale studies and effective preventive measures in order to halt this silent epidemic.

Key Messages:
With the epidemiological transition, geriatric depression may emerge as an unrecognized public health problem. Quality health care of the elderly reduces the future burden of diseases and disabilities.

The Effects of Short Term Physical Activity Intervention Programme on Body Mass Index, Blood Pressure and Percentage Body Fat Among High School Children in Villages of Mysore District, Karnataka, India.

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Key Words: Village School, Body Mass Index, % Of Body Fat, Blood Pressure.

ABSTRACT
Overweight is considered as a global challenge which is being faced by various health professionals throughout the world. It is also considered as one of the nutritional problem in developing countries, affecting various age groups. It has affected both developed & developing countries of all socio economic groups irrespective of age, sex or ethnicity. The main reason for development of such health related issues could be physical inactivity, sedentary lifestyle, mechanization and other risk factors. These changes are also seen as a gradual trend among the rural adolescent population.

Aims/Objectives:
To determine the effects of a short term physical activity on BMI, blood pressure & body fat in high school children in rural community.

Material & Methods:
The children were selected from high school villages around Mysore district were selected. The duration of the study is conducted for a period of 6 weeks. The number of sessions was 3 days per week for a period of 40 to 60 minutes. The body mass index (BMI), BP & % of body fat was measured. Healthy children have a BMI percentile ranging from 5th percentile to 85 percentile. The children with more than 85% but less than 95% were considered as obese & overweight who were equal to or greater than 95%. Physical activity was recorded with the help of school curriculum & questionnaire specially designed for them. The consent was taken from DDPI & head of the institute before the inclusion in the study Inferential & descriptive statistics has been used in this study.

Results & Discussion:
Prior to intervention it was found that 17% were found to be obese & at least 12% were hypertensive. Following the intervention it was reported that BP as well as BMI & % body fat was influenced in a positive way.

Conclusions:
The study concludes that a short term physical activity intervention programme conducted with moderate activities can affect the BMI, BP & % of body fat levels in rural school children.

Can Behaviour Change Communication (Bcc) Intervention Reduce The Risk Factors of Type 2 Diabetes?: Study Amongst High Risk Adults in A Tribal Area of Thane District

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Keywords: Type 2 Diabetes, Bcc, Tribal Population
ABSTRACT
Diabetes is looming as one of the greatest threats to public health in the 21st century. 80% of people with diabetes live in low- and middle-income countries.

Aims/Objectives:
A study was undertaken to find out the impact of community based Behavior Change Communication intervention on reducing the risk factors of type2 diabetes amongst people at risk, in a tribal area of Thane district.

Material & Methods:
A prospective interventional study was conducted in a tribal field practice area under Rural Health Training Centre (RHTC), Department of Community Medicine of a tertiary care hospital in Mumbai.

Results & Discussion:
A total of 96 high risk adults were studied. The participants included 64 males & 32 females, with a mean age of 50 yrs. At baseline 21.9% of the participants had B.M.I. 25 kg/m² which reduced to 15.6% at 6 months after BCC intervention. Similarly, abdominal obesity (waist circumference 90 cm for male & 80 cm for female) also showed improvement after 6 months. However, physical activity and weight loss goals were achieved significantly less frequently.

Conclusion:
Behaviour Change Communication intervention can be feasible & the most costeffective strategy to prevent type2 diabetes amongst high risk people in rural settings.

Rehabilitation of HIV/AIDS infected children and family.
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Keywords: Rehabilitation of HIV/AIDS, Training & Counciling, Grouping & Human Rights.

ABSTRACT
India is one of the largest and most populated countries in the world. Its estimated that over 2.4 million people are currently living with HIV. Infection rate is so fast is affecting in all sectors of communities like sex workers and truck drivers. In a country where poverty, illiteracy and poor health are rife, the spread of HIV presents a daunting challenge.

Aims/Objectives: To aware people from source of HIV and make people literate how HIV spread and how to overcome from HIV so that HIV no. is decreased day by day. Make normal people friendly with HIV patients.

Material & Methods:
Following are methods to overcome from HIV 1) Rehabilitation of HIV/AIDS infected children family and awareness in rural and urban area about HIV/AIDS. 2) Treat and rehabilitate HIV positive women and children. 3) Empower and educate deprived children and women from slum. 4) Empower unwed mothers, widowed mothers and rape victims and rehabilitate the infants through adoption. 5) Care for and support women and children in distress

Results & Discussion:
By going above methods we reduce HIV infection rate in upcoming years so that India take rescue from HIV/AIDS.

Conclusion:
The rescue and rehabilitation of victims of commercial sexual exploitation trafficking, and their children support them so that they can lead a life of dignity.

Upper Limb Deep Vein Thrombosis
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Keywords: deep vein thrombosis,Upper extremity, cancer

ABSTRACT
Deep vein Thrombosis (DVT) is associated with significant morbidity and mortality. Upper extremity vein thrombosis accounts only for 1-4% of total DVT. It mostly affects axillary and sub-clavian vein, resulting in proximal arm swelling, discomfort on use, and prominence of engorged collateral veins in the upper arm and chest. In a resource limited rural hospital based settings, early diagnosis is crucial, since early recognition and a fast symptom orientated therapy are necessary for a good outcome.

Aims / Objectives:
We report the course and outcome of upper extremity deep vein thrombosis in a known case of cancer of cervix female patient, who had completed chemotherapy and 17 cycles of radiotherapy. This case of upper extremity deep vein thrombosis is selected for case report as it is a rare form of deep vein thrombosis without a very well established treatment modality and prognosis.

Material and Methods:
A 52 years old female patient presented with complaints of swelling in left submandibular region since one year and in
left upper limb since fifteen days. After baseline investigations along with color doppler and USG of neck, it was found that, she had developed left subclavian thrombosis extending into the internal jugular vein. She was treated with low molecular weight heparin and oral warfarin.

Result / Discussion:
She responded well after conservative treatment. Spontaneous improvement following conservative management, while initially good, ceases after the first few months. The patient had no apparent recurrence or any other complication during subsequent follow up, except the presence of occasional dull pain over the affected left upper extremity.

Conclusion:
This case provides additional evidence indicating that complications in patient with upper extremity deep vein thrombosis can be minimized if managed timely and conservatively. Early diagnosis and treatment is essential to avoid long-term sequelae.

Reexpansion Pulmonary Edema
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Keywords: reexpansion pulmonary edema, pneumothorax, chest tube

ABSTRACT
Reexpansion pulmonary edema (REPE) is a rare, but life threatening complication of pneumothorax. Various hypotheses regarding the mechanism of REPE include increased capillary permeability due to hypoxic injury, decreased surfactant production, and altered pulmonary perfusion and mechanical stretching of membranes. In a resource limited rural hospital based settings, early diagnosis is crucial, since early recognition and a fast symptom orientated therapy are necessary for a good outcome.

Aims / Objectives:
This case report illustrates the presentation and course of unilateral REPE in a 60 years old man with spontaneous pneumothorax, without heart disease, after the insertion of a chest tube.

Materials / Method:
A 60 year old man known case of COPD, chronic smoker with no other significant medical history was admitted with short duration history of dyspnoea and fever. Chest x-ray showed right –sided pneumothorax. A chest tube was inserted and connected to an underwater seal drainage system without the application of external suction. Three hours later, the patient developed unilateral re-expansion pulmonary edema and severe hypotension. Patient responded well to active management, which included administration of fluids, antibiotics and steroids.

Discussion / Result:
Although supportive therapy is the rule, the condition is far from benign and mortality estimates are as high as 20%. Risk factors, including young age, a large pneumothorax and longer (more than 3 days) duration of collapse, may help predict which patient will encounter this complication. In patients with these risk factors, suction should never initially be used with the thoracostomy tube initially, in an effort to prevent REPE primarily.

Conclusion:
When REPE is encountered, therapy is supportive. Considering the high mortality rates related to REPE, preventive measures are still the best available strategy for patient handling.

Health Surveillance in Workers Exposed to Pesticides. Experiences in Latin America
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Keywords: Pesticides workers, health surveillance

ABSTRACT
The pesticide usage and its impact in agricultural workers have long being documented in Latin America; besides many actions to monitor pesticide exposure the health and death in workers still is highly prevalent. Most of the surveillance programs have been appointed to look into the acute poisonings but miss some of the chronic effects like cancer. The prevention of acute toxicity and death is one of the most critical issues; aiming for a productive and sustainable agriculture. Biological monitoring and hazard control as well as Integrated Pest Management Programs play an important key role in the protecting agricultural worker’s health.

Aims/Objectives:
Give a vision into the situation of pesticide occupational uses in Latin America agricultural workers and their effects in
this population.

**Material & Methods:**
A systematic review information of different pesticide worker’s health surveillance programs and other monitoring systems that have been develop in several countries and sub-regions of Latin America.

**Results & Discussion:**
Pesticides use in Latin America had been increased in the past several decades despite of growing awareness of human health hazard. For this situation the governments and the agro-chemical industry had implement programs oriented towards safe and effective use of pesticides to reduce the risk of acute and chronic poisoning. Some programs collected the evidence about acute pesticide poisonings such as PLAGSALUD (Occupational and Environmental Aspects of pesticide exposure in Central America) and PLAGBOL. The sources of information are the pesticide database of each country of Latin America, another program “SALTRA” registers chronic effects, like occupational cancer and reproductive health issues.

**Conclusion:**
Surveillance program to reduce exposure should be conducted and will required political and inter-sectorial polices, focus in implementation of effective actions, technical advances, research, improving the knowledge/expertise of physicians, oriented by product toxicity, specific

**Evaluation of a Swedish Programme on Injury Prevention in rural Farm Businesses**
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**Keywords:** agriculture, injury prevention, national program, evaluation

**ABSTRACT**
Swedish research has shown that only 10% of actual injuries are reported in the agricultural sector and that the injury frequency is highest for small farm units (< 400 work hours/year). These findings, together with a high frequency of fatal injuries, prompted the Swedish Government to initiate an action programme against injuries on farms. The aim was to develop a system of farm supervisors, provide training for these and plan for a first action period (2009-2013), related to the EU Rural Development Programme. This action plan was given the name “Safe Farmers Common Sense” to point out that the key to improved safety is in the head of the farmer. The Swedish Farmers’ Association is running the programme, with part-time farmers as supervisors, and they offer support to farmers through farm visits or a short course entitled “Three Steps to a Safe Farm”.

**Aims / Objectives**
The aim of this programme is to reduce the number of injuries by 50% by the end of the action period in 2013, but also to make farmers’ more safety aware and more proactive in improving safety on their farms.

**Material &Methods**
In order to evaluate this programme for the first whole year of activity (2010), a telephone survey was carried out in early 2011 with farmers who had received an on-farm visit (220, 73% response rate) or attended the short safety course (364, 77% response rate) and a control group (209, 84% response rate). The farmers were asked whether they had introduced any preventive measures on their farms, but also about their attitudes to health and safety.

**Results**
The results showed that over 90% of those surveyed were satisfied with the activity in which they had participated. Regarding the key question of whether they had taken any measures to improve working conditions and prevent injuries on their farm, almost 70% of farmers who attended the safety course reported having made some kind of improvement (e.g. technical improvement, changing working routines, personal protective equipment or further safety education). Of those who received a farm visit, 90% had made improvements. In the control group, less than 20% had made any safety improvements during the period studied.

**Conclusion**
These results indicate that activities that stimulate farmers to improve their working conditions could be effective, but it is important to monitor whether the effects persist and evaluate the effects on the actual injury rate. Further evaluations of these and other farmers will follow.

**Practices Related to Drinking Water in a Rural Block of Haryana**
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**Keywords:** Practices, Drinking water, rural area

**ABSTRACT**
Much ill health particularly in developing countries can be traced to lack of safe & wholesome water supply. Safe drinking water is a basic element of primary health care. There are many sources of drinking water in rural areas- a piped water supply from public health system, wells & handpumps etc. As per villagers psyche, well water gives more strength
to the body which the piped water from public health system is not providing & whenever multiple sources are present in
the villages, rural people tend to drink water which is not fully safe. Even if safe & wholesome water is supplied, its
storage & drawing practices may affect the quality of water.

Aims/Objectives-
1. To study the sources of drinking water in households
2. To study the storage practices of water

Material & Methods-
The present study was carried out in block Lakhan Majra, Distt Rohtak, Haryana- a rural field practice area attached to
Deptt. of Community Medicine, PGIMS, Rohtak. The study was conducted from June 2009 to Nov 2010. It was a cross
sectional study & 560 households were selected by stratified random sampling technique.

Results & Discussion -
Max. (56.3%) households used public health supply while 7.3% used well water. In majority (69%) the reason for not
using public health supply was non availability of water while turbidity or lack of cleanliness was least common reason
for non use. Water was kept covered in max. (98.6%) households. Ladle was used in 29.1 % households. Water was
freely available in 44.5% households while it was fetched from a distance by 2.5% households.

Conclusion-
Rural people are to be motivated to use safer sources of drinking water & they are to be educated on safe drawing
practices of water.

Patterns of Effective Utilization of Rural Health Service in Work Related Low Back Pain on
Agriculture
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Keywords: Low Back Pain, Visual Analog Scale, Roland And Morris Disability Questionnaire, Agriculture

ABSTRACT
Although there are different types of agriculture farming each with its own specific health and safety risks, some health
concerns are common to most farmers and farm laborers. Evidence in the scientific literature indicates that exposure to
farming leads to work related Low Back Pain due to repetitive motion and adverse ergonomic conditions. Various health
services like Physician consultation, Physiotherapy, Patient education and rehabilitation services are available.

Aims/Objectives:
To determine the combined and isolated effect of physician consultation, physiotherapy and patient education for work
related low back pain in agriculture workers.

Material & Methods:
Participants were randomized to one of four groups, Group-1: combination of Physician consultation and physiotherapy
(n=30); Group-2: Physician consultation alone (n=30); Group-3: Physiotherapy alone (n=30); and Group-4: Self care
booklet control (n=30). Treatment was administered for 1 week and measurements were taken at the baseline and end of
one week. Questionnaires inquired about pain intensity by visual analog scale and self-rated disability by Roland and
Morris disability questionnaire.

Results & Discussion:
Baseline values are homogenous in VAS and RMDQ between the 4 groups. (p>0.05). Post values of VAS and RMDQ
score shows significant difference between the groups through on way ANOVA (p<0.05). Group-1 shows 66.99%
improvement in pain intensity when compare to Group-2 (61.26%), Group-3 (41.60%) and Group-4 (23.28%). Group-1
shows 82.06% improvement in self rated disability when compare to Group-2 (79.51%), Group-3 (69.75%) and Group-4
(32.38%).

Conclusion:
The Physician consultation with Physiotherapy service was more effective in reducing pain intensity and disability than
the physician consultation or physiotherapy alone in Work related Low Back Pain on agriculture workers. The present
study showed that short, specific treatment programs with proper patient information may alter the course of work related
low back pain.

Diagnosis of Occult Fractures of The Ischiopubic Rami
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Ibaraki, Japan.
Keywords: Occult Fracture, Osteoporosis

ABSTRACT
Recently, the diagnosis of occult fractures has been facilitated due to increased availability and utilization of MRI.
Diagnosing a fracture of the ischiopubic rami from a proximal femoral fracture, in particular, is difficult using physical
exam alone and can be facilitated by having access to an MRI.
Aims/Objectives:
we report both physical exam findings and MRI findings that help in differentiating occult fractures of the iliopubic rami.

Material & Methods:
From April 2010 to July 2012, we identified 20 patients (3 male and 17 female; aged 43–93 years old). We recorded if a traumatic episode occurred, ambulatory status at the initial visit (bed ridden, standing up with an aid, walking with an aid). We also recorded if imaging was used in determining the final diagnosis (radiographs, MRI or CT).

Results & Discussion:
Fifteen patients had a fracture as a result of a traumatic episode. In the remaining 5 cases, no trauma occurred and therefore the fractures were insufficiency fractures. Eight patients were bed ridden at the initial visit, five patients were able to stand only with a walking aid, and the remaining seven patients were able to walk with an aid. Occasional radiographs were used to confirm the presence of a fracture in 3 cases, MRI in 7 cases, and CT scan in 10 cases (Three patients had a pacemaker or metal fragments or artificial hip joints).

Conclusion:
Occult fractures of the ischiopubic rami can occur without trauma and it can be difficult to differentiate these fractures from occult proximal femoral fractures. In these cases, MRI is useful to definitively obtain a diagnosis. In cases of pacemaker or bullet implantation or artificial hip joints, CT or occasional radiographs are also useful to diagnose occult fractures of the ischiopubic rami.

A Study of Cashew-Nut Processing Industry Workers in Rural Andhra Pradesh
Dr Shilpa P Lanjewar., Indira Gandhi Government Medical College, Nagpur.

Keywords Cashew-Nuts, Rural, Industry, Notifiable.

ABSTRACT
Introduction:-India is a global leader in cashew exports accounting for over 60% of the world’s total cashew trade. Not much attention has been given to mechanization of the production process simply because cashew factories have traditionally been labour intensive and relatively cheap.

Aims/Objectives:
i) To determine the occupational health status of the workers with special reference to the potential health hazards from the cashew processing,
ii) To recommend preventive and control measures wherever necessary.

Material & Methods:
A multicentric study was carried out at various cashew processing plants viz Srikakulam, Prakasam, East Godavari etc in Andhra Pradesh from Nov 2009- 2010. A pretested questionnaire was used to collect information regarding the manifestations due to occupational exposure and subjects were investigated for vision by Titmus Vision Tester and PFT with recently calibrated computerized spirometer. Total 246 study subjects were randomly selected from various processing frying, steaming, roasting, supervisory and administrative units.

Results & Discussion:
Amongst all, 87 were male and 159 were females. Majority of them belonged to 36-45 yrs age group (35.89%), had occupational exposure less than 10 yrs (48.71%), had poor nutritional status (46.15%), occupational dermatoses (56.15%) on one or both hands in younger age who ignored use of PPE than experienced workers. Visual abnormalities and anaemia were present in 38.46% and 68.20% respectively, 19 workers had mild restrictive respiratorymorbidities.

Conclusion:
Processing of cashew nuts is notifiable under “Dangerous processes & operations” under Section 87 of Factories Act, 1948. Study recommends regular screening of workers by a certifying surgeon for anaemia, dermatoses, PFT, visual problems and notification. Personal hygiene, PPE use should be mandatory.

Staphylococcus Aureus: Prevalence Status of Multiple Resistance Strain and its Hazards in the Rural Community
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Keywords: Aureus, MDR, MRSA, Antibiogram

ABSTRACT
Staphylococcus aureus is a well known food poisoning organism, but nowadays compared to its food poisoning hazards, the resistance to various recent antibiotics pose a major threat to the rural community. Spreading of antibiotic resistance bacteria is an unseen giant problem in rural area. Marine fishes are generally not having S. aureus while catching; however, fish is the one, which is handled in most unhygienic manner that leads to mass contamination with S. aureus. On average, 50% and 20% of the total population harbours S. aureus in skin and intestine respectively. On average 60% fisher folk harbour S. aureus on their skin.

Aims/Objectives:
Multi Drug Resistance (MDR) S. aureus is one of the emerging problem encountered in most of the hospitals; it is very fatal to those immuno compromised, elderly and AIDS patient. Since, the seafood in the rural area is handled improperly; our aim was to find the presence of any potential hazardous S. aureus and its prevalence in a particular commercial fish market.

**Material & Methods:**
Forty numbers of S. aureus strains were isolated from sea foods of commercial fish markets of Vashi, Maharashtra and tested for the coagulase test. Antibiogram was carried out with 20 different types of antibiotics.

**Results & Discussion:**
Among the 40 isolates, 8 isolates exhibited multiple drug resistance (MDR); most of the strains were resistant to the lactam and Macrolids. 40% of isolates showed resistance to Penicillin followed by ampicillin, erythromycin, amoxyclave, cephalothin, azithromycin and clarithromycin.

**Conclusion:**
Hospital originated MDR S. aureus proliferates in the fish market and slowly spreads to the population, simple washing and handling of the fish will be sufficient to cause an infection to consumers or handlers. Proper cooking and hygienic handling of fish avoid most of the disease outbreak and control the spread of MDR bacteria.

**Antibiotic Resistant Escherichia Coli in Drinking Water of the Tribal Community of Maharashtra, India**
Nerkar S S 1,2, Tamhankar A J 1, 3 and Stålsby Lundborg Cecilia11. Division of Global Health (IHCAR), Dept. of Public Health Sciences, Karolinska Institutet, Stockholm, Sweden2. BAIF Development Research Foundation, Pune, India3. Indian Initiative for Management for Antibiotic Resistance, Department of Environmental Medicine, R D Gardi Medical College, Ujjain, India

**Key words:** antibiotic, bacteria, resistance, tribal.

**ABSTRACT**
The burden of infectious diseases is a major public health problem in most tribal areas. Bacterial diseases contribute more due to unsafe drinking water and poor sanitation. Escherichia coli have been used as an indicator bacterial species to know the contamination of drinking water. Recent outbreaks of multi-drug resistant bacteria in different parts of the world including India have raised severe concerns about antibiotic resistance. Indiscriminate and irrational use of antibiotics is one of the reasons for the development of resistance.

**Aim:**
To know the E. coli contamination and antibiotic resistance in the tribal community and environment.

**Methods:**
Total 81 drinking water samples were collected from seven different sources over a period of 12 months in a tribal block of Maharashtra, India. Standard methods were followed for isolation and identification of E. coli. Disc diffusion method was used to test antibiotic sensitivity to a total of twelve antibiotics from different groups viz. amino glycosides, penicillins, cephalosporins and quinolones.

**Results:**
It was found that the contamination level varied in different seasons. Rainy season, winter and summer season showed contamination percentage of 67.9, 46.4 and 24.0 respectively. The organisms from different water sources showed different levels of sensitivities to antibiotics. Most of the isolates showed a moderate level of resistance to Amikacin and Cefadroxil. Resistance was also recorded to Netilin, Gentamicin, Ampicillin+Sulbactum, Cefoperazone and Ciprofloxacin. Bacteria from five drinking water sources showed resistance to at least two of the tested antibiotics in all seasons.

**Conclusion:**
Antibiotics are a very easily usable and cheap resource for combating infections. Development of resistance to antibiotics even in remote tribal areas is a warning signal that if antibiotics are not used rationally, soon a time will come that antibiotics will become ineffective, infectious diseases will become untreatable and then poor and deprived population will suffer heavy fatalities.

**Health Hazards of Indoor Air Pollution in Indian Perspective**
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**Key Words:** Indoor Air Pollution, Cooking Smoke Health Hazards, Clean Stoves

**ABSTRACT**
In the developing countries, majority of women cook over open fires. The smoke that results can lead to severe health problems. In India, air pollution is highest indoors, where biomass fuels like wood, of animal dung, crop residues, and grasses, are burned without proper ventilations. Research into household air pollution shows that smoke from cookstoves increases the risk of chronic diseases. Currently around 3 billion people rely on biomass fuels for cooking, heating
orlighting (Bruce et al 2000). The most conservative estimate of the annual global deaths attributable to the use of biomass fuels is 1.8 million (Smith and Mehta2000), due to acute respiratory infections.

Aims/Objectives:
To create awareness amongst the underprivileged, evaluating the impact of health hazards through IAP by collecting data of rural households and disseminating data to offer solutions with end goal of creating awareness of clean-cooking by providing alternatives & eliminating risk of health hazards and reducing environmental degradation.

Material & Methods:
Interventions for reducing exposure to IAP:• smoke reduction (through changing stove and/or the fuel)• smoke removal (use of chimneys, flues, smoke hoods or increased ventilation)• behaviour change (cooking outdoors, or exclusion of children exposure). Also, involves considerations on policy-change at National Level. By administered questionnaire, include questions on household circumstances, general health, awareness of health impact of cooking smoke and willingness to change.

Results & Discussion:
Large numbers of Households in India cook indoor, using biomass fuel with no ventilation. Once aware of adverse effects, women will be willing to change cooking practices with appropriate roadmap with intensive action and with measurable results that can change the lives of many.

Conclusion:
Increasing the consciousness of the health-hazards of indoor biomass cooking is the first step in implementing a program to reduce exposure.

Strychnine Poisoning - A Diagnostic Dilemma in Emergency.
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Key Words: Strychnine, Nepal, Emergency

ABSTRACT
An alkaloid derived from seeds of the tree Strychnos nux vomica, was first used as a rodenticide. Strychnine was used in the form of white powder but use has decreased in recent times. It was used by municipal office to kill stray dogs but is already banned in Nepal.

Aims/Objectives:
Illustrate a case of strychnine poisoning

Material & Methods:
The researchers followed up a case of strychnine poisoning in Emergency which was referred from peripheral centre with the presumable diagnosis of tetanus.

Results & Discussion:
A 32 yrs female presented to the ER after referral from a peripheral centre with a diagnosis of tetanus. Patient was agitated, anxious, & experiencing muscle spasms. She was fully conscious. Vital signs were stable with BP = 120/70mmHg, heart rate 80/min, temperature 37.2°C. Generalized increase in muscle tone & the sensory stimuli increased muscle twitching. No evidence of cut, prick or infected wound present. The cause was later traced to ingestion of powder which was kept at home after being brought by her husband who worked in municipal office and long forgotten.

Conclusion:
Strychnine poisoning is uncommon, but potentially fatal. Judicious clinical judgment is essential. Though clinical symptoms can mimic tetanus, rabies, & epilepsy, strychnine ingestion should be considered in all cases of awake convulsion of obscure etiology. As confirmatory diagnostic means are lacking in our set up, meticulous history taking, & revision of history in light of circumstance may give a clue in case of diagnostic dilemma. With early diagnosis & management, the patient can survive.

Revealing Genetic Mechanism of CR (VI) Induced Toxicity in Caenorhabditis Elegans
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Keywords: Caenorhabditis Elegans, Cr (Vi), Lifespan, Rt-Per

ABSTRACT
Caenorhabditis elegans is widely used in environmental monitoring owing to the number of factors viz. abundance in soil ecosystems, convenient laboratory handling, completely sequenced genome and sensitivity to different kinds of stresses. Cr (VI) is a toxic heavy metal used in various industrial processes, mostly finding rural localizations and causing harms to human health. Cr (VI) induces DNA damage responses and oxidative stress inducing a cellular redoximbalance, which is linked to cancer incidence as well as apoptosis.
Aims/Objectives:
The study evaluates the acute toxicity of Cr (VI) on C. elegans for identifying the expression of sensitive genes as part of metal-activated stress responses. Growth and reproduction were investigated as physiological descriptors of metal toxicity.

Material & Methods:
Wild type N2 worms were transferred to plates supplemented with various concentrations of Cr (VI). Life span assay was performed by counting the number of worms daily till the death of last worm. Quantification of stressed genes was observed by RT-PCR and confirmed using transgenic mutant of C. elegans.

Results & Discussion:
The results showed that on increasing the concentration of Cr (VI), the mean lifespan was shortened as 15(1iM), 14(10μM), 11(100μM) and 8 (1mM), days respectively against the control mean life span of 16 days. Cr (VI) concentration of 10mM and 100mM were found to be deleterious to C. elegans N2 worms depicting the acute toxicity of Cr (VI). Genetic analysis revealed enhanced expression of antioxidant genes such as Catalase and SOD. Enhanced expression of hsp16.2 further confirmed the toxic effects of Cr (VI).

Conclusion: C. elegans homology to humans can be beneficial for toxicity assessment and easy testing of the possible solutions.

Study of Clinical Profile of Patients Presenting with Snake Bite in Rural Population of Maharashtra.
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Keywords: snake bite, anti snake venom.

ABSTRACT
Snake bite remains one of the important environmental hazards in our country, especially in the rural parts of the India. In this study we have analyzed the clinical profile of the patients presenting with the snake bite in the rural set up with detailed analysis of social and clinical aspects and also the results of good tertiary care availability.

Aims and Objectives:
To study types of snakes found in the area and bites by them with specific clinical profiles, prognostic factors and associated complications. Also various clinical problems faced during the treatment with special reference to requirement of the anti snake venom. This also included causes of delay in reporting to the proper hospitals.

Materials and Methods:
This was a prospective case study conducted over five years period from May 2007 to May 2012 at a tertiary health care centre ( Pravara Rural Hospital and Medical College, Loni )

Results and Discussion:
Out of 446 patients of snake bite 258 (21.97%) showed signs of envenomation, out of these 55 (21.31%) patients were with neuroparalytic symptoms and remaining 203 (78.69%) were having local and/or vasculotoxic features. Total 12 (4.65%) deaths were reported.

Conclusions:
Not too long ago when death rates due to snake bites used to be around 90 -95%, the advances in medical sciences and availability of the health services to the rural population has led to substantial decrease in the mortality due to snake bites ( 4-5%). However it was noted in the study that it was very difficult to predict or formulate the exact amount of anti snake venom in a given patient in view of various factors affecting envenomation, varying and at times confusing symptomatology of the patients. Most of the mortality and morbidity noted in the study was related to wrong practices and false beliefs with still play a major role in denying patients and early and quality health care. This more than ever underlines the importance and necessity of better health education and social awareness regarding snake bites amongst the rural population in areas having high incidence. Presenting Authors: Bagrecha MV*, Talele RP** Final year post-graduate student, Department of Medicine.

A Study to Evaluate the Effectiveness of Multi-Disability Training of CBR Workers in Rural District of Karnataka.
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Key Words: CBR, Multi-disability, disabilities

ABSTRACT
CBR is highly effective and valuable for people with disabilities in the community. CBR personals at remote rural play
an important role in early detection of disabilities. Studies have revealed that CBR workers in India tend to be lacking in work experience. The identification and proper guidance can help to overcome the shortages as various studies have stated that an effective training curriculum for CBR workers should contain a multi-disability training approach.

**Aims/Objectives:**
To assess the effectiveness of multi-disability training among the rural CBR personal and to evaluate the assessment skills of CBR personnel’s after training.

**Material & Methods:**
The study design was an experimental design of 12 month’s intervention confined to chamrajanagar district. Evaluation was performed at baseline and 12 months with pre-test questionnaire of subjects emphasizing on their knowledge on disabilities. Also data of disabilities identified in previous year through Records was collected. Subjects included the CBR workers at NGO in Chamrajanagar district. The subjects were trained CBR personals having basic knowledge about the identification of disabilities and with the age group of 20 to 35 yrs. The subjects were trained with practical exposure on multi-disability level at various centre in Mysore at an interval of 6 months. A post test at the end of 12 months included a questionnaire and collection of data records of disabilities identified was analyzed statistically by computing the mean, standard deviation, percentages, paired test and chi-square test.

**Results and discussion:** The test findings related to effectiveness of multi-disability module with significance. The subjects had an improvement in their confidence level and knowledge on identification of motor disabilities.

**Conclusion:**
The findings reveal that knowledge regarding early identification of disabilities play an important role as a part of CBR programme in the rural and training the CBR personal on multi-disability is an important source for better outcome.

**Changing Trends of Poisoning in Indian Villages With The Emergence of New Poisons; A Challenge to Rural Health.**
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**Keywords:** Pendimethiline, Poisoning, Rural, India

**ABSTRACT**
Agrochemical poisoning is an important global health problem and accounts for thousands of deaths worldwide every year. It is usually suicidal, and most due to exposure to organophosphates, aluminum phosphide and organochlorines compounds. The situation is more awful in the developing countries of Asia – Pacific region including India, particularly in setting of low education and poor regulatory frameworks. India is a predominantly agrarian country with large rural population (60 to 80%), where these compounds are an integral part of agriculture are readily available at a cheap rate. Due to their intrinsic toxicity, new chemicals of high potency and low toxicity continue to be developed e.g. Imidacloprid, Pendimethiline, and Pencycuron etc. They are released to the market without appropriate data on direct human toxicity. Instead, human toxicity is often extrapolated from toxicological studies in animals, the relevance of which is poorly defined. They are classified as a "moderate toxic", and generally demonstrate low human lethality but at times they may be hazardous. Their substitution for existing highly toxic compounds, may save a number of precious lives. But the clinical consequences and management of poisoning with such newer chemicals are not very well described. Recently some new chemicals have also been increasingly used for suicidal purposes in rural areas. Hair dye is one of them; it is highly toxic, cheap and very easily available in the rapidly growing markets of Indian villages. This is an emerging problem in the tropics. Here we are reporting such unusual and entirely new toxicities and trying to highlight the need of their early recognition and timely management especially in rural regions with poor health care facilities. Such information / Case Reports may prove to be beneficial for clinician, concerned authorities and public at large.

**Mental Health & Disaster Medicine for Rural Areas**

**Japanese Reaction To Radioactive Pollution Occurred By the Nuclear Power Plant Accident Associated with the Japan Huge Earthquake**
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**Keywords:** Nuclear Power Plant, Accident, Risk Of Radiation, Panic, Peaceful Use Of Radiation

**ABSTRACT**
Japan is the only country suffered from atomic bomb disasters and is one of the earthquake islands. March 11th, 2011, a huge tsunami induced by an earthquake attacked the East district of Japan. The tsunami took 20 thousands of lives instantly and provoked an accident of nuclear power plant at Fukushima. Fukushima accident has developed radioactive
environmental pollution that could last for ages, and has thrown Japan into utter confusion.

**Aims/Objectives:**
Among the confusion of such as politics, economics, and medicine, authors stress on that of Japanese people mind to radiation accident.

**Material & Methods:**
We used Japanese news or reports and frequently performed lectures to citypeople by the author, whose hospital located adjacent to Fukushima Prefecture and also affected by the earthquake.

**Results & Discussion:**
In the early period of the accident, Japanese people panicked with the radiation accident hazard conducted by mass media not by specialists: radiation is very dangerous. But no one died of radiation effects. The majority of people did not know radiation risk correctly and rumors prevailed: all the Fukushima products were shut off from the commercial circulation. Non-profit medical organizations worked from the beginning. In the late period, knowing about radiation scientifically such as radiation units (Sv or Bq), patterns of exposure (external or internal), and radionuclides (I, Cs, or Sr) through mass media, the people seemed to have recovered from the panic status. This April Japan determined to use radiation risk criteria of food stricter than those in western countries. More recent changes of Japanese people including health care status at the East district of Japan will be conducted.

**Conclusion:**
Among the lessons from the earthquake accident, the most important to there construction seems to be the proper knowledge of the accident status.

**Response and Agenda of our Hospital to Great East Japan Earthquake**
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**Key Words:** Great East Japan Earthquake, Hospital response, DMAT

**ABSTRACT**
Great East Japan Earthquake that occurred 14:46 pm 11 March 2011 was a complex disaster the world has not experienced (large earthquakes, a huge tsunami, the nuclear power plant accident). Intensity 6 lower was recorded in the southern part of Ibaraki Prefecture our hospital is located, the buildings of our hospital is affected by the earthquake, but fortunately there was little damage to infrastructures such as electricity, water, and gas. Disaster response of our hospital as a designated local antidisaster center was as below: 1) Check the damage of the hospital and assurance of security of our patients and staff Because damage of the older wards seemed extensive, we evacuate about 200 patients from older one to newer and safer wards. 2) Dispatch DMATs after confirming that there is no mass casualty at neighboring areas and the hospital situation is stabilized. Ensure that there is no damage to patients and hospital staff and their families, and the hospital function can be maintained, DMATs was dispatched to situation assessment operation in the affected areas of Ibaraki prefecture, and to medical management operation at prefectural disaster countermeasures office. Later, our DMAT provides assistance to people working at Fukushima nuclear power plant for restoration. 3) Accept patients transfer from devastated areas Accept dialysis patients and evacuated patients from the hospitals at disaster stricken areas. 4) Medical care to evacuation center Medical teams were dispatched to several evacuation centers in order to medical check and care of evacuees. Above mentioned step-by-step approach, that is, first priority was our patients and staff, and then neighboring area to Ibaraki and other prefecture, was proven to effective.

**The Roles of Primary-Level Health Workers in Delivering Rural Mental Health Care in India**
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**Keywords** Rural mental health care, primary care workers, lay health workers, India

**ABSTRACT**
Despite significant economic advances, India does not meet the basic health requirements of many people in low-resource settings. Particularly neglected, is the significant burden of mental illness. There are barely 3000 psychiatrists for a population of 1.2 billion and even fewer clinical psychologists, psychiatricsocial workers and nurses. Most are located in the private sector and major cities. Several studies suggest that primary-level health workers (PHWs)(professionals: primary care doctors/nurses/social workers and nonprofessionals: lay health workers) – are effective in reducing the treatment gap.

**Aims/Objectives:**
This study describes the current delivery models of mental healthcare through task-sharing with PHWs, and seeks to understand the acceptability and feasibility of scaling-up these models.

**Material & Methods:**
We visited and interviewed 241 people (PHWs, supervisors/specialists and programme staff/founders) within 37 projects
in 12 States, chosen to represent 23 models of PHW-delivery. We explored health worker roles, perceptions and programme characteristics. This data was triangulated with project documents and related published literature.

**Results & Discussion:**
Lay health workers’ motivation to join this field varied from personal reasons (having mentally ill relatives/ being reformed users), to economic reasons, or for status and satisfaction. Their main roles were to identify, to refer patients to either the primary-care doctor (government settings) or the psychiatric team (NGOs), and then follow-up. Primary-care doctors were involved ingovernment programmes, but were not a resource for NGOs. Mental healthroles of generalist social workers, and nurses were poorly developed. PHWs’ greatest challenges were poor remuneration, inadequate training and support (leading to poor motivation) and difficulty coping with community prejudice and stigma.

**Conclusion:**
Programmes with adequate mental specialist support for PHWs are more motivating and acceptable to PHWs, and most functional. We discuss what other aspects of these PHW models are sustainable, feasible and acceptable. We suggest how to better utilize and scale-up PHWs within government- and NGO- mental health care programmes.

### The Status of Depression in Persons with and Without Disabilities in A Rural Setting

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**Keywords:** Depression, disability, rural, adults

**ABSTRACT**
International studies show that people with disabilities are at a greater risk of depression, yet there is a paucity of evidence in India.

**Aims/Objectives:**
This study aims to understand the association between disability and depression among adults (15+ yrs) in rural Goa, India.

**Material & Methods:**
Data were collected from Carambolim, Goa on 648 adults aged 15+ years participating in a community-based study evaluating chronic disease risk factors and outcomes in healthy households. Informed consent and ethical clearances were obtained from the collaborating organizations. STATA was used for bivariate and multi-variate analyses. Disability was measured through the WHO Disability Assessment Schedule (WHODAS) 2.0 short scale (12-items) and severity was classified according to the International Classification of Functioning guideline. Depression was assessed through the Personal Health Questionnaire (PHQ-9).

**Results & Discussion:**
Thirty four percent of the adults suffer from mild/moderate/severe disability, while 17% were found to have mild/moderate/moderately severe/severe depression. Again, 27% of the people with ‘moderate/severe disability’ are suffering from moderate/moderately severe/severe depression. The corresponding figures are 7% and 1% respectively among people with ‘mild disability’ and ‘no disability’. Additionally, the mild/ moderate/moderately severe/severe depression is high among women (22%) compared to men (12%); people aged 40+ years (24%) than those 15-24 years (12%); and married (16%) as against unmarried (10%) people. After adjusting for age, sex and marital status, those with mild disability (OR- 5.31, CI: 3.24-8.69) or moderate/severe disability (OR- 19.19, CI: 7.37-50.00) are significantly more likely to have any depression (PHQ-9 >9) than those with no disability.

**Conclusion:**
Disability increases the likelihood of depression and the severity increases with disability magnitude. Effort to consider mental health and disability awareness for health care delivery seems pertinent.

### Study of Stress Factors Amongst Students of Private Allopathic Medical College

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**Keywords:** Private Medical College, Stress Factors, Medical Students

**ABSTRACT**
Medical profession, although a noble profession, is not spared from the stress and suicidal tendencies. Stress, if not dealt effectively, loneliness, nervousness, and sleeplessness is inevitable. The pressure to excel and obtain the degree is highest. Continuous studies, home sickness, improper food habits and competition with fellow students add to the stress.

**Aims/Objectives:**
Aim: To study stress factors amongst students of private allopathic medical college Specific objectives: Study
socioeconomic status of medical students; Understand common stress factors amongst them; and Learn coping method used to relieve stress.

**Material & Methods:**
A cross-sectional study carried out in one of the private colleges in Pune, Maharashtra, after due permission from medical college. Pre-devised, pre tested semi-structured questionnaire was prepared after an initial pilot study conducted in 30 students studying in third year of MBBS course. Total 294 students were interviewed with 100 students from first year, 99 from second year and 95 from third year (minor). All students studying in the college were included except for those who did not give their consent to participate in the study. Students were contacted at hostel, guest room or as per their convenient place and timing. Likert,s scale with score from 0 – 4 was applied to assess stress levels for known factors and questions asked for learning coping mechanisms.

**Results & Discussion:**
The study will inform us the common stress factors in medical students and whether socioeconomic factors play role in stress development. It will also tell us coping mechanisms used by students to manage stress. The data is being analyzed and will be presented later.

**Conclusion:** Study findings are awaited as data being analyzed.

**Prevalence and Determinants of Depression Among Elderly in Rural Wardha, Maharashtra, India**
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**Keywords:** Depression, Elderly, Geriatric Depression Scale

**ABSTRACT**
India is currently witnessing epidemiological transition where we have significant burden of communicable as well as non-communicable diseases. As result of change in Socio-economic status the expectancy of life is also increasing, which results in rise in proportion of elderly population. The spectrum of health problem among elderly population is different. One of the common problems of elderly population is psycho- somatic disorder especially depression. Therefore the present study was conducted.

**Aims/Objectives:**
1. To determine the prevalence of Depression among Elderly in rural Wardha.
2. To understand the determinants of Depression among Elderly.

**Material & Methods:**
**Study Design:** Cross - sectional Study
**Study Area:** Gaul PHC area of Wardha District.
**Study Subjects:** Elderly (65 years of age) male and female residing in study area. Sample Size and Sampling: Sample Size calculated was 329. Villages were selected by Systematic random sampling and the study subjects were selected by simple random sampling.

**Data Collection:** Data were collected on basic socio demographic profile. Geriatric Depression Scale (Short form) was used to estimate the presence of depression.

**Data Analysis:** Collected data entered and analyzed using EPI Info version 3.5.3 Software. ChiSquare test was applied.

**Results & Discussion:**
The mean age of the study subject was 70 years with 50.7% being males and 49.3% females. The overall prevalence of depression among elderly was found to be 47%. Prevalence among females (51.4%) was more than among males (48.6%). There was statistically significant difference between prevalence of depression among subjects more than 75 years of age than less than 75 years. Sex, socioeconomic status, type of family, marital status was not found to be significant factor but the history of chronic illness, addiction and history of psychiatric illness in past was significantly associated with history of depression.

**Conclusion:**
In Future public health policy, priority should be given for promoting mental well being of elderly in rural area.

**An Epidemiological Study on Depression Among College Students in District Faridkot, Punjab**
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**Key words:** Depression, Becks Inventory Depression scale, College Students.

**ABSTRACT**
Depression has been under diagnosed and under reported in primary care settings. Various illnesses and bio-psychosocial factors have been implicated as the contributing factors for depression. The overall rate of depression has increased in recent decades; depression is now being seen at younger ages and with greater frequency worldwide. Very few studies have been done in the past to estimate the magnitude of the problem of depression in the community in India, particularly so among the college going students.

**Objective:**
To find out the prevalence of depression among college students.

**Materials and methods:**
A cross-sectional study was done among the randomly selected 700 college students studying in various colleges of district Faridkot, Punjab. The following formula was used for calculating the sample size for estimating the population proportion with specified relative precision – Sample size (n) = \((Z_{1-\alpha})^2 \frac{P(100-P)}{e^2}\), where \(Z_{1-\alpha}\) is confidence level at 95% (standard value of 1.96), ‘P’ is estimated prevalence of depressed in the previous study and ‘e’ is the allowable error (Relative precision). The sample size here was calculated on the basis of 20% prevalence of depression and a relative precision of 15%, with a 95% CI. Therefore, \(N = \frac{3.84(20 \times 80)}{32i.e., N = 683}\). This sample size was rounded off to 700. These students were screened by a General Health Questionnaire (GHQ-12), followed by assessment by using Beck’s Depression Inventory scale (BDI). Prior consent was taken by the head of the institution.

**Results:**
The data entry is in process by using epi info statistical software package and the final results and the inferences drawn along with the test of significance applied will be presented at the time of the presentation.

**A Study to Assess the Stress and Coping Among Widows Residing in Selected Areas of Udupi District**
Avita A.A. Fernandes1, Dr. Suja Karkada 2, Mrs. Ansuya3 Clinical Instructor, Institute of Nursing Education, Bambolim, Goa University, Goa,2 Professor and HOD, 3 Assistant Professor, Dept. of Community Health Nursing, Manipal College Of Nursing, Manipal, Manipal University, Manipal.

**Key Words:** widow, stress, stressor, coping

**ABSTRACT**
A women experiences a lot of stress in order to cope with the demands of life as a widow. Low income and social support can lead to suffering for the widow and her dependent children.

**Aims/Objectives:**
To assess the levels of stress and identify the coping strategies adopted by the widows; find the association between stress levels and selected variables; coping strategies and selected variables; find the relationship between stress level with coping strategies, systolic blood pressure and diastolic blood pressure.

**Material & Methods:**
A descriptive survey approach was used to conduct a study among 52 widows who had lost their husbands on or before 6 months, were less than or equal to 55 years of age and residing in Katapadi village. Snowball sampling technique was used to collect the data through structured interview method.

**Results & Discussion:**
The analysis of data revealed majority 86% of the widows were aged above 40 years, 55.8% were widowed for a period of more than 5 years, 61.5% were receiving widow pension. There was significant association between stress and number of children \((r=0.262, p<0.05)\); stress and diastolic blood pressure \((r=0.461, p<0.05)\); coping strategies adopted and type of family \((r=0.125, p<0.05)\) and widow pension \((r=0.170, p<0.05)\), however other variables were independent of stress and coping level. Spearman’s correlation coefficient showed positive relationship between stress and coping \((r=0.020, p<0.05)\) and between stress and diastolic blood pressure \((r=0.012, p<0.05)\). There was no significance found between stress levels and systolic blood pressure.

**Conclusion:**
The study was limited as it used purposive sampling method, so generality of the study was limited to the sample. By this study we can conclude that the widow is at risk for developing stress related disease. Adequate widow pension, vocational training and family support can enhance the widow’s coping.

**A Preliminary Study of Perceived Stress and Stressors Among Undergraduate Medical Students in Rural Haryana.**
Dr Abhishek Singh, Dr Anu Bhardwaj, Dr Sk Ahluwalia, Dr Ak Mukherjee MM Institute Of Medical Sciences, Mullna

**Keywords:** Stress; Medical; Students

**ABSTRACT**
Today’s medical student is tomorrow’s professional, mental and health care provider. In recent years there is a budding appreciation of the stresses involved in training of medical students.

**Aims/Objectives:**
The present survey was conducted to assess perceived stress in medical undergraduate students and to determine the sources of stress and their severity.

**Material & Methods:**
The present cross sectional study was carried out at MMIMSR, Mullana in the months of March and April 2012 using self-administered questionnaire. Perceived stress score was measured using perceived stress scale (PSS). Responses of
528 students were included in the study. Unpaired t test and one way ANOVA were used in data analysis.

**Results & Discussion:**
A total of 528 students participated in the study. 56.1% were male and 43.4% were female. Mean PSS score was found to be 27.17(S.D=5.44). Mean PSS score in females was 28.47 and in males 26.09 (p< 0.05). Most commonly occurring academic stressors were frequency of examination and performance in examination. However, becoming a doctor and performance in examination and practicals were rated as most severe academic stressors. In the category of psychosocial stressors- Quality of food in the mess (52.73%) and lack of entertainment (45.36%) were cited as most common. Quality of food, lack of entertainment and difficulty in journey back home were cited as most severe. Health related stressors which were commonly reported included quality of food in mess (50.84%) and lack of exercise (26.08%). Quality of food and class attendance were rated as most severe.

**Conclusion:**
The present study indicates of high levels of psychological disturbance in these medical students in the middle phase of the course. Hence there is a need to take measures by the authorities to reduce stress among students.

**Screening for Depression in Elderly**
Raul Anagha.V, Sagare S.M
Department of Community Medicine, Bharati Vidyapeeth Medical college, Pune

**ABSTRACT**
The Indian aged population is the second largest in the world. A high revalence of mental disorders is one of the leading causes of disease burden after DM and hypertension.

**Aim and Objectives:**
1. To determine the prevalence of depression among the elderly population. 2. To identify the risk factors with respect to depression in elderly.

**Material and Methods:**
Study design: Cross sectional study  
Sample size: 216  
Study area: Southern part of urban and rural Pune  
Inclusion criteria: more than 60 yrs of age  
Study tool: Predesigned Questionnaire including WHO 5 Well being index and Mastering depression in Primary care version 2.2 was administered

**Results:**
The prevalence of depression was determined to be 21.2%. The major risk factors for depression in elderly were death of spouse, low socioeconomic status, personal illness and retirement.

**From Mother-In-Law To Daughter-in-Law: Examining The Intergenerational Association in Fertility Behaviour in Rural Bihar, India**
Abhishek Kumar
International Institute For Population Sciences, Govandi Station Road, Deonar, Mumbai

**Keywords** Intergeneration; Fertility Behaviour; Age At Birth; Family Planning; Bihar; India

**ABSTRACT**
Studies from developed country have documented a strong correlation between parent’s fertility behaviour and children’s fertility preferences and behaviour. But the issue is under researched in developing countries, particularly in India. While in Indian family system which is characterized by strong inter-family relationship and the extended kinship structure, individual fertility behaviour may be regulated by her individual characteristics along with the behaviour of other family member or the older generation.

**Aims/Objectives:**
The objective of the study is two folds: First, to examine the changes in fertility behaviour – age at first birth, number of children ever born, ever use of family planning – across the generation, second, to examine the association between observed fertility behaviour across the generation.

**Material & Methods:**
This study analyzed primary data from rural area of the Saran district of Bihar, which is collected during April – May, 2011. Information is collected from both the generations – mother-in-law and daughter-in-law – residing in the same household and sharing same kitchen at the time of the survey. Descriptivestatistics and multivariate techniques are deployed to fulfil the objective.

**Results & Discussion:**
Age at first birth and the use of family planning is starkly varied across both the generations – mothers-in-law and daughters-in-law, while the number of children ever remained similar. Mothers-in-law preferred sterilization to regulate the fertility, while daughters-in-law are in favour of modern contraceptives. These characteristics are influenced by the individual’s characteristics such as educational attainment, economic status of the household. Findings indicate that mothers-in-law were appeared as a barrier in use of family planning among daughter-in-law.

**Conclusion:**
The findings indicate stark differentials in fertility behaviour across the generation. An association with the use of family
planning across the generation is channelled by value socialization within the family. Finding suggests that mother-in-laws should be included in information-education-communication campaigns of family planning.

Profile Audit of ICTC Clients Attend Institute of Medical Sciences BHU, Varanasi, U.P.
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Key words: ICTC, HIV, ART, AIDS.

ABSTRACT
HIV (Human Immunodeficiency Virus) counseling and testing services are a key entry point to the prevention of HIV infection and to the treatment and care of the people who are infected with HIV. The integrated counseling and testing centre (ICTC) services are a cost effective intervention in the prevention of HIV/AIDS (Acquired Immunodeficiency Syndrome).

Aims:
To study the profile of the attendance at the ICTC centre. Setting: The ICTC at Institutes of Medical Sciences BHU. Varanasi, U.P. Study Design: A descriptive study, record based study.

Materials and Methods:
The study population included 41159 clients who attended the ICTC centres from January 2009 to December 2011.

Results:
An overall 12.85% of the ICTC attendees were HIV Seropositive subjects. During 2009 to 2011 i.e. Past 3 years total males tested for HIV at the ICTC were 23326, out of which 3202 were HIV+ve showing positivity rate of 13.7%, while total females tested were 16671 out of which 2063 were HIV+ve showing positivity rate of about 12.4%. Consecutively in the last three years maximum Load of patients was from the age groups 35-49 years (19.13%) followed by 25-34 years (15.4%). Of all 62.4% were referred from ART, 20.9% from Government health facilities and 14.7% were voluntary clients. Out of 5265 HIV+ve patients during three years, 2053 (39%) had education up to secondary school, followed by 1841 (35%) who were illiterate and 938 (17.8%) educated up to primary school and about 433 (8.2%) from college going group and above. Out of total HIV+ve patients 5265, 1897 (36%) were housewives, 1034 (19.6%) were daily wage workers, 541 (10.3%) were Salaried, 451 (8.6%) were of business class, 286 (5.4%) were driver, 360 (6.8%) were doing no work and 200 (3.8%) were students. The most common mode of transmission was having multiple heterosexual partners. Majority of HIV seropositive patients were married and they contribute 73.9%. Unmarried and widowed were the next major contributors and constituted 10.8% and 14.6% respectively.

Conclusion:
People’s attitudes towards HIV are changing after the introduction of the ICTC, which plays a major role in the primary and secondary prevention of HIV. There is a more Urgent need for the introduction of interventional measures like sex education and preventive education among the general population.

Knowledge, Attitude and Practice of Epilepsy Among Patients and Family Members Attending Urban Health and Training Centre (UHTC), Shahganj, Aurangabad
Hashmi S J, Dixit J V, Department of Preventive and Social Medicine, Government Medical College, Aurangabad-431001

Key words: Epilepsy, Knowledge-attitude-practice (KAP), UHTC, PWE (patient with epilepsy)

ABSTRACT
Stigmatized psychosocial perception poses a serious challenge and source of discrimination which impedes epilepsy patients from attaining a satisfactory quality of life. The present study was aimed to obtain information on knowledge, attitudes and practices (KAP) of epilepsy patients and family members in urban slums and compare with the published data from India.

Aims And Objective:
To study knowledge, attitude and practice of epilepsy among patients and family members residing in urban slum.

Methodology:
Study Design- Hospital based cross-sectional study. Study Place- UHTC, Shahganj, Aurangabad. Study Period- 1st to 29th Feb 2012. Sample- KAP study was conducted by face to face interview of 100 persons including patients and family members of epilepsy using a predesigned and pretested questionnaire.

Results:
A large majority (95%) of PWE had heard about epilepsy and (53%) knew that epilepsy is an organic brain problem. Only 4% consider epilepsy as contagious. Negative attitude was observed with respect to not allowing a child with epilepsy to study (18%), objecting children to play with a child with epilepsy (12%), and unsuccessful marriage (19%). Negative attitude was reflected in the belief that epilepsy is due to previous life sins (5%). About 73% people believed that allopath is a better option than ayurvedic (25%). A very small proportion, i.e. only 2% believed that holy treatment
with worship is effective in treatment of epilepsy. About 40% felt that epilepsy can be cured, but almost 60% thought that a person with epilepsy has to take life long treatment. In response to first aid measures in response to epileptic fits, 60% preferred that they would take the person to a hospital, 23% felt that they would put a shoe or onion on nose, 15% would splash water over the face, and 2% would make the person hold a bunch of keys.

Discussion.
Analysis of Indian data revealed regional differences in KAP which could be attributed to local factors, such as literacy, awareness about epilepsy, and practice of different systems of medicine. Some of the differences can also be attributed to category of study population whether it included patients or non epilepsy individuals, since the former are likely to have less negative attitudes than the public. There is a need to create awareness about epilepsy on a nationwide basis to dispel the misconceptions and stigma through effective and robust programs with the aim to lessen the disease burden.

Efficacy of Vestibular Stimulation Exercises on Posture and Balance in Children with Cerebral Palsy
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Key Words: Cerebral palsy, vestibular stimulation exercises

ABSTRACT
Cerebral palsy (CP) is a group of disorders affecting body movements, posture and balance. Vestibular apparatus plays an important role in maintaining posture and equilibrium. It co-ordinates information from the vestibular organs in the inner ear, eyes, muscles and joints and adjust muscle tone, posture and balance. It may affect in children with brain damage during birth, and may cause postural imbalance and poor equilibrium. Thus through this study the effects of vestibular stimulation exercises on posture and balance were assessed. Also the difference between effects of vestibular stimulation exercises and conventional physiotherapy exercises were compared.

Methodology
Study setting: CPT, PIMS, Loni  Study design: Randomized control trail, Sampling method: Convenient sample method, Sample size: 10, Inclusion criteria: children between the age of 6 to 12 years, GMFCS level 1 to 2, spastic type of cerebral palsy, able to communicate verbally. Exclusion criteria: Children with any other neurologic problem, visual disabilities, any fixed deformity. Outcome measures: Gross motor function measure (GMFM-66), Pediatric balance scale (PBS).
Participations were divided in two groups. Group A (control group) received conventional physiotherapy exercises and Group B (experimental group) received vestibular stimulation exercises.

Results
After applying paired ‘t’ test there is significant difference between mean GMFM score, and mean PBS score. Results suggest that there is significant difference in improvement with subjects who received vestibular stimulation exercises as compared to conventional physiotherapy exercises.

Conclusion: Vestibular stimulation exercises improves posture and balance in children with cerebral palsy. There is more improvement in posture and balance in children with cerebral palsy with vestibular stimulation exercises as compared to conventional physiotherapy exercises.

Primary Health Care

Demographic Trends and Migration: Rural Health Challenges in the Global Village
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Keywords: Demographic trends, Global migration, Migration health, Occupational health, Vaccination

ABSTRACT
According to the estimation of UNDESA, the total number of migrants crossing officially the border of their country of origin (international migrants) from the 191 million in 2005 has increased to 214 million in 2010. In spite of the global economic crisis no any slow down could be seen globally. Nearly half of the people who are leaving their home country are migrating with the hope of finding a job abroad, known as ‘migrant workforce’. Migration is highly defined by the global demographic trends. Various scientific resources unanimously forecast a continuous growth of the Globe’s population up to the mid of our century. With the likely continuous existence of the ‘push’ and ‘pull’ factors in the source countries population, this would continue practicing the so called ‘migration influx pressure’ on the target countries.

Challenges:
Many of host countries have an ‘aging society’ and would gain economic benefit from the migrant workforce. In spite of this, their health/public health/occupational health services are not prepared to ensure the smooth integration of migrants; moreover the work conditions of migrants could be characterized as ‘3D’ – their job is Dirty – Dangerous – Difficult. Several reports are highlighting its health consequences, especially for migrants living in rural areas. Not paying
the needed attention to the geographic regions defined differences in the morbidity profile as well as in the public health/immunization conditions of migrant people may lead to their inappropriate health assistance and the reappearance of vaccine preventable diseases. Recently WHO had to increase its efforts in controlling new Measles and Polio outbreaks and postpone the target date of their eradication.

Conclusion:
Globally increasing migration challenges both the economic and the health systems of the host countries. Appropriately trained health professionals are playing a key role in the smooth and successful integration of migrant workforce. The CHANCE consortium of six EU universities aims to cope with this challenge.

Gender Composition in Indian Population - Trends, Issues and Concerns.
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Keywords: Gender, Sex-Ratio, Sex-Selection, Patriarchy, gender discrimination.

ABSTRACT
The composition of population by gender is one of the primary demographic characteristics of human population. There are different indicators, but sex-ratio is one of the best indicators to measure gender balance in urban and rural life. The overall sex-ratio (OSR) at national wide (the number of females per 1000 males) in 2011 census has improved by seven percent to 940 against 933 in the census of 2001. The provisional data in 2011 census shows that the child sex ratio (0 to 6) comes down to 914 female per 1000 males against 927 in 2001. Child sex-ratio is a powerful index to examine the social response on female child. Decaling girl child population leads to serious demographic imbalance and adverse impact on a rural and urban society. This trend creates issues and challenges before urban and rural Indian population. This is an issue of great concern.

Aims / Objectives:
- The present paper aims is studying the trends and patterns of child sex-ratio in India.- The main objectives are to examine the causes for decaling ratio of girl children and its challenges.

Methodology:
The study is based on secondary data such as census of India. It is also confined to various previous empirical research and our own observations.

Discussion:
The gender composition in population focuses the trends and issues of status of a girl child, why millions of female-fetuses in India are killed before they are born? Why many of girl-children do not reach the age of six? What are the causes of such discrimination? What are our challenges? Is that due to genderbias? These are some of the points of concern and discussion.

Conclusion:
This paper examines the spatial as temporal analysis on trends as well as patterns of sex-ratio. There are many causes but preference for male-child, socio-cultural values and economic condition are still the major cause for gender inequality. Declined child sex-ratio leads to future challenges. Therefore rigorous efforts are needed to solve the issues of gender balance so far as Indian population is concerned.

Socio-epidemiological Profile of Disability Pattern in Geriatric Rural People - A Challenge for Management & Care
Dr. Sufiyan Ahmad Ghawte1, Dr. Ghazala Mulla21. Lecturer, 2. Prof. & HOD, Dept. of Medicine, Z.V.M. Unani Medical College & Hospital, Azam Campus, Camp, Pune 411001

Keywords: geriatric, rural, disability, socio-epidemiology.

ABSTRACT
There is a sharp decline in mortality and steady decline in infertility resulting in a high percentage of population aging in India. Moreover the joint family system is disintegrating resulting in changes in socio-epidemiological profile, which has a negative impact in the disable elderly. Thus it is a challenging problem which is faced by India.

Aims and Objectives:
The present study aims to assess certain disabilities such as visual disability, hearing disability, speech disability, locomotor disability and general inability to carry on daily activities of life (DAL) in elderly population.

Material and Methods:
The study will be carried out during the period 2011-2012. A pretested questionnaire will be used to collect data pertaining to socioeconomic status and disability status of the elderly population in Khed Shivapur village near Pune city. This will also throw light on dependency ratio in rural area and general distribution of elderly.

Results and Discussion:
In addition to increase level of illness the aging process also leads to certain degenerative diseases and disability. Many
times these disabilities cannot be cured but need special management & care. This poses a great challenge to the medical profession, the family and the community. The data from this study will help to assess the magnitude of this problem and take appropriate restorative measurement.

A Study to Assess the Knowledge Regarding Selected Aspects of Healthy Lifestyle Among Geriatrics in Selected Area of Kolhar.

Mr. Pankaj Yohan Kale, RNRM MSN (CHN), PGDHA, ML, Lecturer, College of Nursing, Pravara Institute of Medical Sciences, Loni

ABSTRACT

Objectives: To assess the knowledge of selected aspects of healthy lifestyle among geriatrics. 2. To study sociodemographic factors and its association with knowledge regarding healthy lifestyle.3. To give education about healthy lifestyle.

Methodology:
The research design selected for the study was descriptive survey. The study was conducted in Kolhar village. 100 individuals above 60 years residing in Kolhar village were enrolled in study. The semi structured interview method was adopted. The reliability of the tool was calculated using split half method, Karl Pearson correlation formula found that tool was reliable (0.92). After validation data collection was carried out in March 2012. The investigator conducted cross-sectional survey. Samples were selected using purposive sampling method. The conceptual framework adopted for the study was general system theory. After data collection knowledge about selected aspect of healthy lifestyle was given to each sample. Data gathered was analyzed by using descriptive statistics in terms of frequency and percentage.

Result:
50 % of the geriatrics were from 60-65 years of age group, 52% were male, 71% were married, 55% were illiterate, 43% were having monthly income less than 2000, 54% were having cement concrete house, 52% were doing house work, 72% were residing in Joint family, 53% were vegetarian, and 81% were getting health information through television. The knowledge on selected aspect of healthy lifestyle was assessed by 30 question items based on diet, exercise, hygiene and habits. Mean score of knowledge on selected aspect of healthy lifestyle is 15.17 (50.56%). Area wise knowledge had following scores as, regarding healthy diet (3.72) 46.5%, regarding healthy exercises (2.44) 40.66%, regarding hygienic practices (4.95) 55% and regarding good habits (3.44) 49.14%. Regarding the knowledge of selected aspect of healthy lifestyle only 09 % has good knowledge about healthy lifestyle, 81% of geriatric population has satisfactory knowledge and 10% of the geriatric population has poor knowledge. There was significant correlation found with sociodemographic factors (especially with type of family i.e. Joint family and type of house i.e. Pacca house) and knowledge of domestic precaution. The finding of the study has implication in nursing education, nursing administration, community health nursing and nursing research. The investigator imparted the knowledge on selected aspects of healthy lifestyle to all the samples after the semi structured interview. The study helps to raise awareness about healthy lifestyle among the geriatrics. Such issues will prevent problems in geriatrics and will raise the issue of healthy ageing. Nursing professionals should take initiative to impart knowledge on such issues.

Bibliography:

Morbidity Data and K.A.P. of Health Seeking Behavior of Rural Elderly in Maharashtra-India

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Key words: Morbidity, K.A.P study, health seeking behavior, disability.

ABSTRACT
In India the elderly population constituted 7.4% of total population. Low fertility rate, low birth rates and long life expectancies are the few causes of population ageing. Elderly people face multiple medical and psychological problems. In rural areas as high as 55% of aged with sickness and 77% of the aged without sickness felt that they were in good or fair condition of health. Elderly persons suffer from chronic diseases like heart disease, hypertension, diabetes mellitus, cancer and osteo-arthritis. Morbidities like anemia, dental problems, chronic obstructive airway disease, and cataract are
common in population ageing. About 64 per thousand elderly people suffer from one or more disabilities; most common disabilities are locomotor, hearing and blindness. Hence population ageing is one of the major concerns for policymakers of India. Objective: of this study is to collect morbidity data and to determine relationship with disability and health seeking behavior.

Methodology:
A cross sectional survey will be carried out. Morbidity and health seeking behavior will be assessed by Knowledge, Attitude and Practice (K.A.P) study. The K.A.P. study will be carried out by group and individual interviews, clinical examination, cross-checking of medical records and medication (folk medicine or prescribed by the physician) held by the subjects. Appropriate statistical test will be used to assess the relationship and association with morbidity and health seeking behavior.

Result:
Will be presented after analysis of data and will be presented in statistical form. Outcome of the study will help in the application of medical & social interventions, to improve the health status and thus ensuring that the elderly population just not merely lives longer but led a secure and dignified life.

A Study the Attitude of Parents Towards Girl Child in Selected Rural and Urban Area at Rahata, Ahegednagar District.
Mrs. Yogita Pankaj Autade, Lecturer, College of Nursing, Pravara Institute of Medical Sciences, Loni

ABSTRACT
Changes in sex ratio reflect underlying socioeconomic, cultural patterns of asociety. According to Census of India 2011, Indian sex ratio is 940/1000. Haryana has the lowest sex ratio of 877 females per 1000 males. So Sex Ratio of India varies from region to region. Kerala and Puducherry are only two places in India where total female population is more than the male population. Birth of female child is perceived as a curse with economic and social liability. In each corner of India, girls face discrimination. Therefore, to assess the attitude towards girl child, I have done this study in rural and urban area.

Statement:
A study the attitude of parents towards girl child in rural and urban area at Rahata in Ahmednagar District.

Objectives:
1. To assess the level of attitude towards girl child in rural and urban area
2. To make an analysis of rural / urban differentials in attitude
3. To assess the attitudinal impact of various programmes and policies initiated by the government, and other schemes for children and specifically for the girl child.

Research Methodology:
Exploratory research study was done. The study was conducted in 4 wards of Loni village and 4 wards of Rahata Town by using convenience sampling technique. Sampling unit includes Father and Mothers i.e. 100 individuals were enrolled in study 50 from rural area and 50 from urban area. Modified attitude five point Likert scale was used. The validity and reliability is done. Data collection was carried out in May 2012. Data gathered was analyzed by using descriptive statistics in terms of frequency and percentage and Mean Percentage.

Result:
60% were mother and 40 % was father participated in the study. 93.4% father were literate and 76.2% mother was literate in both the areas. About 91.3% of fathers were employed in urban area and 30% were employed in rural area, and per capita income of majority of the families was above Rs. 200 per month. Educational status of the children in the 3-14 years age group enrolment was 100% in both the area. About 10% children left school prematurely in rural area. There was no difference between the proportion of male and female school dropouts. The marriage average age for girls is still 2 to 3 years less than boys i.e. 22-24 for Girl and 25 or above for Boy. Preference towards boy child if we can have only one child is more in rural area (Mean 3.78) Girl is the pride of home is more considered by rural people (Mean 3.65). Serving of dinner to girl child after boy child is more considered in rural area (Mean 2.97). Contribution to household work is almost equal in both areas (Mean 3.20,3.16). Sending girl child to hostel for further studies is more considered by urban people (Mean 3.97). But according to sixth factor i.e. with drawing girl child from studies incase any economic crisis rural people are more effected by it (Mean 2.86). Girlsare considered as cowards equally in both the areas. Boys are preferred more for driving in rural areas (Mean 3.84). But when it comes to comparison of Laadli scheme urban people are more in favour of it (Mean 2.74). Even urban people are more in favour of property right to girl child (Mean 2.90).

Conclusion:
From the study findings it is abundantly clear that although gender biasness hasreduced to a great extent in urban areas but rural areas still require to eliminate certain barriers. Thus, finally taking cumulative effect of all the factors we can conclude that boy child is still at preference over girl child in rural areas.
The Effect of Physical and Cognitive Functions on Mortality Risk by Frail Persons in Japan: Results of A Four-Year Cohort Study (2000–2004)
Jung-Nim Kim, Kuninori Shiwaku, Tokyo University and Graduate School of Social Welfare, Shimane University, School of Medicine, Japan

Keywords: Physical And Cognitive Functions, Mortality Risk, Frail Person

ABSTRACT
During the past half century, Japan has achieved considerable success in reducing mortality risk. Since 1980, death rates in the country, however, have increased again from 625.5 deaths per 100,000 people in 1985 to 947.1 in 2010. Previous studies about the increasing death rate among frail elderly were not whether it was physical or cognitive functional factors which increased the mortality risk.

Aims/Objectives:
The purpose of this study was to examine whether risk for mortality of frail persons in Japan was associated with what physical or cognitive functions among frail persons in care facilities and in as well as those living at home.

Material & Methods:
We used longitudinal data in Izumo City between 2000 to 2004. In 2000, 2,550 persons had certified levels of care needs and all residents of care facilities and in home residents were ultimately analyzed. We arbitrarily divided the frail residents into two categories: care facilities residents and in-home residents at the baseline. A Probit model was used to evaluate the influence of physical and cognitive functions on mortality risk.

Results & Discussion:
Within the study period, we found that frail persons in care facilities compared to the in-home residents had the lowest survival rate. Results from the Probit model showed that physical function decline was associated with the risk of mortality in both care facility and at home. Vital functional disability had a significant effect on the risk of mortality for those at home, while cognitive impairment had a significantly adverse effect on the risk of mortality in care facilities, but mental disability was not statistically significant both groups.

Conclusion:
Frail persons with physical impairment are at high risk of mortality in care facilities and at home. Further study is needed to improve functional trajectories in frail persons with this prevalent multimorbidity. When physical cognitive disability is present, efforts to maximize the other functions maybe beneficial to lower mortality risk. The influence of Physical and Cognitive Functions on risk for mortality is comparable with well-established risk factors for mortality.

A Study to Assess the Effectiveness of Video Assisted Teaching Module on Preventive Measures on Osteoporosis Among Elderly Women in Rural Population.
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Keywords: Osteoporosis, Elderly, postmenopausal, women.

ABSTRACT
Osteoporosis referred as a porous bone is a disease of bones that leads to an increased risk of fracture. It presents with reduced BMD, deteriorated bone microarchitecture and altered proteins in bone. The peak incidence of osteoporosis in India is 50-60 years, as compared to 70-80 years in the West. Pathology underlie imbalance between bone resorption and bone formation. Osteoporosis risks like fractures and frequent fall can be reduced with lifestyle changes and sometimes medication. Lifestyle change includes diet and exercise and preventing falls.

Aims/Objectives:
To assess the knowledge among rural Elderly Women regarding Preventive measures on Osteoporosis and to evaluated the effectiveness of Video Assisted Teaching Module regarding knowledge on Preventive measures on Osteoporosis.

Material & Methods:
The study design was a randomized control trial with pre-post test with upto 12 month’s intervention. Clinical evaluation testing was performed at baseline, seventh day, 6 months and 12 months. Subjects of 50 elderly women at rural area around Mysore and Chamrajanagar districts of aged 60-80 years were considered for the study by purposive sampling technique.

Outcome measures:
The method of data collection included development of tool, testing of validity, reliability and data collection procedure. The tool was initially written in English and was then translated to Kannada. The interview schedule consists of two part, Demographic Data and Structured interview schedule to assess the knowledge regarding Osteoporosis. A Video Assisted Teaching Programme (VATP) included an outline of video including details of osteoporosis in dramatic to reach the rural community. VATP was administered in their local language followed by discussion. After 7 days, a post-test was conducted using same structured interview schedule for evaluating the effectiveness of VATP. Follow up evaluation at around 24 weeks and 48 weeks was conducted through phone/personal contact. The data was analyzed statistically by
computing the mean, standard deviation, percentages, paired ‘t’ test and chi-square test.

**Results and discussion:**
A descriptive evaluative approach post 7day test findings related to effectiveness of VATP. Mean pre-test score of 39.35 was increased to 70.35 after VATP. This significant increase statistically signifies that VATP is effective tool in educating the rural on osteoporosis. Findings also revealed that there is a significant association between pre-test knowledge score and demographic variables.

**Conclusion:**
The findings reveal that knowledge regarding Preventive measure on Osteoporosis among rural Elderly Women was improved after the implementation of Video Assisted teaching programme towards Preventive measures on Osteoporosis.

**Is Short Term Physiotherapy Effective in Sarcopenia: A Case Study.**
Sant SS, Shete DR, Khatri SM & Deepali Hande., Shrikant Sunil Sant College of Physiotherapy, PIMS, Loni.

**Keywords:** Sarcopenia, old age, timed get up and go test, resistance exercise.

**ABSTRACT**
Sarcopenia is like a silent killer, characterized by shrinkage of skeletal muscles. It is an inevitable part of ageing and affects approximately 45% of older population. Over the period of time, Physiotherapy has become an integral part of geriatric care. However, there is limited evidence about effectiveness of short term Physiotherapy. Hence it was decided to investigate this with an intervention like progressive resistance exercises in sarcopenic individual.

**Aims/Objectives:**
To assess the effectiveness of short term physiotherapy, in form of progressive resistance exercise programme in sarcopenic individual.

**Material & Methods:**
The patient was 77 years old woman came to primary health center of Pravara Medical Trust, situated at Babhaleshwar; with a complaint of weakness in lower limb and difficulty in walking since 1 year. After primary assessment she referred to Physiotherapy department. The participant was screened for Sarcopenia as per European Consensus Of Sarcopenia Working Group in Older People (ECOSWGOP) criteria. She was treated with progressive resistance exercises with weight cuffs for six weeks, and calf circumference, grip strength and timed get up and go test were used as outcome measures.

**Results & Discussion:**
There was 2.54% improvement in her calf circumference, 2% increase in handgrip strength and 17.39% in Time up and go test.

**Conclusion:**
Short term physiotherapy in form of resistance exercises can be used in the treatment of sarcopenia.

**The Assessment of Nutritional Status of The Elderly and Effects of Meal Service and Nutrition Education on Nutritional Status of The Elderly in Risk of Malnutrition in Rural Area**
In Kyung Hwang, Hye Jung Yoon, Sung Soo Kim, Chang Hun Kim, Tae Ho Yoon, Byung Mann Cho, South Korea, Department of Preventive and Occupational Medicine, School of Medicine, Pusan National University;

**Keywords:** Elderly, Nutrition, Meal-service

**ABSTRACT**
Nutrition assessment and intervention are worthwhile endeavors that may add years of independent living and decrease medical expenditure for the elderly.

**Aims/Objectives:**
The purpose of this study is to assess of nutritional status of the elderly in rural area and investigate the effects of meal service and nutrition education on nutritional status of the elderly in risk of malnutrition.

**Material & Methods:**
The subjects were 462 people (141 male, 321 female) aged over 65 years in rural area. The general characteristics, physical health status, mental condition, social relationship, food intake, dietary habits, nutrition knowledge, diet attitude, and nutrition risk index of the elderly were surveyed by individual interview. Also, anthropometric measurements, blood pressure and biochemical indicators were assessed. Nutritional status of the subjects were evaluated by mini-nutritional assessment (MNA). One hundred and ninety eight subjects in risk of malnutrition by MNA were agree to the intervention, and were assigned to three group: meal service and nutrition educated (MSNE) group, nutrition educated (NE) group and non-meal served and non-nutrition educated (Control) group.

**Results & Discussion:**
Ratio of the elderly in risk of malnutrition by MNA was 42.8%. Nutritional status of female was significantly worse than that of male (p<0.05). MNA was significantly related to smoking, physical health status, mental condition, weight, BMI, ratio of body fat, mid-arm circumference, calf circumference, energy and nutrient intakes, regularity of meal and appetite.
(p<0.05). After carrying out nutrition education and meal service for the elderly in risk of malnutrition, scores of MNA in NE and Control group were decreased significantly but that of MSNE group were decreased insignificantly.

Conclusion:
Therefore, nutrition education and meal service are effective in improving the nutritional status of the elderly. In addition, the results of this study suggest that nutrition education and meal service present potential as a elderly welfare.

The Analysis of Serviced Intervention Programs on Grandparents Grandchildren Family in Rural Korean Area
Cho, Yoo Hyang, Park, Yoon ChangMuan-Gun, Muan-Eup, Muanro380, Chonnam Province South Korea- 543-701
Keywords: Intervention Programs, Grandparents grandchildren Family, Rural Area, Time And Motion Study

ABSTRACT
The grandparents-grandchildren family(GP-GC Family) continues to increase in Korea. There are few previous status on the status and problems of GP-GC family.

Aims/Objectives:
The purpose of this study was to investigate served services content and time about serviced intervention programs on GP-GC family.

Material & Methods:
The survey was performed in March 2012 with a structured record to 79 GP-GC families who were served intervention services GP-GC families lived in Muan-Gun of provided by electronic voucher a day per week. The research method used records by care workers and analysis method used SPSS program with t/Ftest.

Results & Discussion:
The kind of intervention services for the GP-GC family were divided services for grandparents and its for grandchildren. The services for grandparents were mainly consultation, health screen and management, nursing services and nutritional education and services. And the services for grandchildren were consultation, learning and teaching services, play therapy and leisure services etc. The number of served programs for grandparents of GP-GC family were 13 programs, the number of served programs for grandchildren were 37 programs. The most long time among the served programs that 50 minutes for education service of grandparents and 2 hours for experiences learning of grandchildren. The program for grandparents was mainly composed health amnagement and nursing services and that for grandchildren was composed learning and teaching services.

Conclusion:
We suggest necessity supports for operation of intervention programs with childcare service and health management include nutrition management about grandparents of GP-GC family.

The Health of The Elderly in India: An Empirical Studyof Rural Uttar Pradesh and Kerala
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Keywords Self Perception of Health, Elderly, Disability

ABSTRACT
Improved health care facilities accelerated the speed of greying population in India. Life expectancy in India has more than doubled in the last sixty years. It increased from around 30 years at the time of independence to over 63.5 years in 2002-06. Dual medical problems, i.e., both communicable as well as noncommunicable diseases can be observed among the elderly in India. Although, the mortality rate from communicable diseases has decreased, while noncommunicable diseases have become the leading cause of death among the elderly of India. This is further compounded by vision, hearing and movement impairment. The prevalence of different disabilities were higher in rural than in urban areas.

Aims/Objectives:
The present paper is aimed to explore the health profile, physical and mentalimpairment of the elderly residing in rural areas in two states of India; Uttar Pradesh and Kerala. These two states of India have different socio-economic, cultural and behavioural settings.

Material & Methods:
The sample consisted of 998 elderly people aged 60 and above, drawn by applying multistage random sampling procedure from the different parts of rural Uttar Pradesh and Kerala. Chi-square test has been carried out.

Results & Discussion:
Age, marital status, and education have significant differences concerning selfperception of health in the sample comprising both the state. Problem in seeing, movement and memory loss found to be major disability among the elderly under study.

Conclusion:
It is evident that the proportion of the elderly in Indian population is increasing rapidly. Increase in age leads to
deterioration of health. Less or no education one may cause less awareness regarding health. Same may happen to the elderly. In the later life, elderly people have to face different health problems and its intensity is based upon different socio-economic determinants. Population ageing is a matter of concern in India.

**Young Males: Messengers of Gender Equality?**

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**Keywords:** Gender Equality, Theatre Of Oppressed.

**ABSTRACT**

“Gender” refers to the socially constructed roles and responsibilities of women and men, in a given culture or location. These roles are influenced by perceptions and expectations arising from cultural, political, environmental, economic, social, and religious factors.

**Aim:**
To sensitize young males about gender stereotyping and gender equality through techniques of the Theatre of the Oppressed - a Behavioural Change Communication strategy.

**Objectives:**
1) To assess the perception and attitude of young males towards females and their various roles in the society. 2) To identify the areas of gender inequality in the perceptions & attitude of these young males. 3) To address the issues of gender inequality using techniques of the Theatre of the Oppressed. 4) To evaluate the effectiveness of the intervention in addressing the issues of gender inequalities.

**Material & Methods:**

**Results & Discussion:**
1) Perception & attitude of students towards females was found to be highly skewed & biased with mean gender sensitivity score being only 14.8 (37%) out of 40. 2) After intervention mean gender sensitivity score improved significantly to 33.7 (84.25%). 3) Gender stereotyping about characteristic adjectives & occupations had also improved after using theatre techniques.

**Conclusion:**
1) Gender attitudes and behaviours are acquired skills and need to be actively developed. 2) BCC strategy utilised in study has potential for inducing behavioural changes. 3) Early sensitization of males at younger age through such innovative BCC strategies can promote sustainable gender sensitiveness amongst males.

**Related Factors Concerning The Quality of Life of the Elderly Population on A Remote Island**

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**Keywords:** A Remote Island,The Elderly Population, The Quality of Life, Related Factors

**ABSTRACT**

Introduction: As the ratio of the aged among the total population has been steadily increasing, plans to improve elderly population QOL on remote islands with few medical and welfare services due to a lack of transportation services needs to be examined.

**Aims/Objectives:**
Objective: This study was conducted to clarify the factors related to elderly population QOL level on Island A.

**Material & Methods:**
Methods: Surveys were conducted between December 2010 and May 2011. The elderly population aged 65 years and older on Island A were interviewed using a semi-structured questionnaire. WHO/QOL was employed for the QOL score and a 2 test and multivariate logistic regression were employed for the analysis.

**Results & Discussion:**
Responses were obtained from 94 people, 31.9% male and 68.1% female, with ages ranging from 65 to 92 years (mean=77.2). QOL scores ranged from 1.62 to 4.35 out of 5, (mean=3.29). When the high-scoring and low-scoring QOL groups were compared, a significant difference was seen in assisted daily living (ADL) scores based on affirmative responses to questions in the following categories: existence of nursing care authorization, usage of nursing insurance, frequency of clinic use, frequency of getting along with volunteer mates, frequency of event attendance, time reading newspapers, hobby enjoyment level, and coping with personal matters. However, no significant difference was observed through multivariate logistic regression.

**Conclusion:**
Good health is related to maintaining ADL and continuing to perform housework chores, which allows the elderly to live
independently while enjoy their hobbies and free time. Traditional networks based on family relationships exist on A Island, and the informal support elderly receive such as food provision, along with the will of the elderly to use their abilities, are related to QOL. Both formal and informal support should be utilized by exploiting advantages on A Island to improve the QOL of the elderly population there.

The Influence of Condom Use Attitude on HIV/AIDS Risk Behaviour and STI Prevalence Among Male Migrant Workers in North India.
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All India Institute Of Medical Sciences,

**Keywords:** HIV/AIDS, Condom Use, Risk Behavior, Migrants

**ABSTRACT**
Male migrants have higher HIV/AIDS risk behaviour particularly inconsistent condom use during Non-Spousal Sex (NSS). Consistent condom use among high risk groups is important for the success of HIV/AIDS prevention and control program which in turn depends on favourable condom use attitude.

**Aims/Objectives:**
This study aimed to determine condom use attitude and delineate their correlates in male migrant workers.

**Material & Methods:**
An industrial unit in Faridabad, Haryana in north India was studied. Male workers aged 18 years born outside Haryana and who had migrated to Haryana after age of 15 years and stayed here for at least 1 year, were included. Information on sociodemographics, HIV/AIDS knowledge, recent (last one year) NSS and condom use were ascertained using a semi-structured questionnaire from workers attending the factory clinic during July 2011. Condom use attitude was measured on 5 point Likert scale. Total score range was 4 to 12 (higher the score, more unfavourable the attitude). Factors associated with unfavourable condom use attitude were identified by linear regression.

**Results & Discussion:**
Data on 743 men were analysed. Unmarried men constituted 23.2%. Mean age and migration duration were 31.4±8.2 and 9.5±6.7 years respectively. Forty eight percent had at least 8 years of schooling. Mean attitude score was 6.6±3.1.
Correlates of unfavourable attitude were older (>25 years) age (b=0.05, p=0.006), higher number of cities migrated (b=0.13, p=0.005), lower HIV/AIDS knowledge score (b=-0.23, p<0.001), inconsistent condom use (b=1.63, p<0.001) and self-reported STI symptoms (b=0.78, p=0.004). The model R2 was 0.55 (ANOVA; F = 84.98, p < 0.001).

**Conclusion:**
Condom use attitude among male migrant workers was unsatisfactory. In order to promote consistent condom use, attitude towards condom use should be favourably modified by intensive interpersonal and behaviour change communication, and focussing attention on men who are older, more mobile, have lower education, lower HIV/AIDS knowledge, and who use condom inconsistently.

Assessment of Magnitude And Pattern of Physical Disability Among Geriatric Population In Delhi
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**Keywords:** Geriatric, Physical Disability, Treatment Seeking Behaviour

**ABSTRACT**
It has been projected that in the next few years, for the first time, there will be more people in the world aged over 60 than children aged less than five. By creating physical and social environments that foster the health and participation of older people and minimizing the consequences of chronic disease through early detection and quality care we can build a society in which older people are respected and valued so that they can lead full and productive lives.

**Aims/Objectives:**
1. To assess the pattern of Physical Disability among geriatric population in a rural area of Delhi. 2. To study the treatment seeking behaviour in this age group.

**Material & Methods:**
Systematic random sampling was used to select a cross sectional sample of the study subjects > 60 years and above living in the rural area of Harijan basti, Delhi. Various physical disabilities namely Locomotor, Visual Hearing and Speech were assessed using the guidelines given in gazette of India, extraordinary, part II section 1 except visual disability which was measured by the presenting visual acuity in the field area using Snellens chart using WHO guidelines.

**Results & Discussion:**
A total of 120 study subjects out of 1300 were found to be eligible for the study. The magnitude of the physical disability was 43.3%. Maximum disability was found to be of visual (60%) followed by locomotor (39%). Many study subjects were suffering from more than one disability, treatment was sought only in 50% of disabilities.

**Conclusion:**
Disability was found to be more in women. Physical disability increased with age. With all study subjects above 80 years were found to be suffering from one or other physical disability. However treatment seeking was seen more in men.

Women's Health & Empowerment

**Maternal Mortality in Rural Maharashtra**
Dr. Kurus. J. Coyaji, Medical Director, Director, Department of Obstetrics & Gynaecology, K.E.M. Hospital, Rasta Peth, Pune 411 011.

**ABSTRACT**
Why are women dying? We have done a WHO funded community cum hospital based case control study on maternal mortality. This study is unique as besides being a case control study it delineates not only the medical factors but also the non-medical factors, which determine why women die. The take home message is that a few innovative non medical strategies like health education for the community, training of providers and an improved referral system may make a quantum change in this scenario. Further, we can also have certain specific medical interventions to bring down deaths due to post partum haemorrhage, unsafe abortion, eclampsia and maternal infections.

**Study of Intimate Partner Violence against Women in an Urban Area.**
Dr. (Air Cmde) Kevin Fernandez VSM, Dr. Dhrubajyoti Debath, Department of Community Medicine, Smt. Kashibai Navale Medical College, Narhe, Pune – 411 041

**Key Words:** Intimate partner, violence, urban, women.

**ABSTRACT**
Violence against women by an intimate partner is a major contributor to the ill health of Women.

**Aims/Objectives:**
1. To estimate the proportion of violence against women with particular emphasis on physical, sexual and emotional violence by male intimate partners. 2. To identify factors that may either protect or put women at risk of partner violence.

**Material & Methods:**
This was a cross-sectional study. The women (18-49 years age) attending the Out Patient Department of Urban Health Training Centre of a Medical College were enrolled in the study after their informed consent. These women were interviewed by face to face technique using a pretested semi-structured questionnaire ensuring adequate privacy. This is a part of the on going study.

**Results & Discussion:**
The total number of women interviewed were 89, out of which the proportion of physical violence amongst women by an Intimate partner was 42 (47.2%), sexual violence was seen amongst 4 (4.5%) women, both physical and sexual violence was seen amongst 4 (4.5%) women. 12 (13.5%) women were unhappy with their Marriage and 6 (6.7%) women gave history of violence in the family as they were growing up.

**Conclusion:**
The intimate partner violence is a major concern for public health professionals and needs to be addressed between lumbar BMD / femoral BMD ratio and the daily number of walks, years after changing a toilet seat, family history of bone fracture, and alcohol ingestion.

**Risk Factors Associated with Lumbar and Femoral Bone Mineral Densities in postmenopausal Japanese Women**
Yoshiaki Somekawa, Ayako Fudono, Takayuki Tatsumi, Rei Ishii, Kana Sekigawa, Maiko Kitano, Hidenori Umeki, Department of Obstetrics and Gynecology, Toride Medical Center Toride, Ibaraki, Japan.

**Keywords:** Bone mineral density, lifestyle, habit

**ABSTRACT**
Japanese women are reported to have low rates of bone fracture of the femoral neck, and high rates of lumber spine compared with Caucasian women. Differences of the bone masses of each part may explain the differences in these rate.

**Aims/Objectives:** The purpose of this study was to analyze the prevalence of risk factors in postmenopausal women, and its correlations with bone mineral densities (BMDs) of lumbar spines and femoral necks.

**Material & Methods:**
The subjects were 241 postmenopausal Japanese women aged 44 to 82 years (mean age 65.2 ± 7.6 yr). BMDs of lumbar spines (L2-L4) and femoral necks were measured by the DXA. Several factors those are thought to be affecting BMD such as, ages, anthropometric factors, menses-related factors, calcium intakes, alcohol ingestion, tobacco smoking, number of times of delivery, family history of bone fracture, years after changing a toilet seat from a Japanese style into foreign style, weekly frequency of athletics, and the daily number of walks were investigated in questionnaire form. The
relationships among these risk factors and lumbar BMD and femoral BMD were analyzed by correlation analyze test. 

**Results & Discussion:**
Lumbar BMD and femoral BMD were strongly correlated with age and weight. Lumbar BMD adjusted with age and weight was significantly correlated with calcium intakes, height, frequency of athletics ($p<0.01$). Femoral BMD adjusted with age and weight was significantly correlated with calcium intakes, height, frequency of athletics ($p<0.01$). Significant correlations were found between lumbar BMD / femoral BMD ratio and the daily number of walks, years after changing a toilet seat, family history of bone fracture, and alcohol ingestion.

**Conclusion:**
The differences between lumbar and femoral BMDs were associated with walking habit, squatting lifestyle, family history of bone fracture, and habits of alcohol ingestion in these postmenopausal women.

**Health Revolution: a way to Empower Rural Women**
Dr. Sita Mishra
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Rajnagar, Ghaziabad, U.P. (India)

**Key words:** health issues, women empowerment, rural women

**ABSTRACT**
Women's empowerment is a new buzzword in the vocabulary of gender literature which refers to enhancing position of women in the power structure of the society. There is a growing recognition among Governments and in the private sector that investing in women and girls has a powerful multiplier effect, on productivity, efficiency and economic growth. In India, the National Policy for the Empowerment of Women, 2001, presents strategies for economic and social empowerment of women while talking about a legal system that is supportive and provides justice to women. Women in urban India are at least up lifted and emancipated and granted equal status with men in many spheres of life though not completely. But without empowering rural women can we claim women empowerment in India. Certainly not, realizing the same issue WHO Western Pacific Region has marked International Women's Day 2012 (8March) by drawing attention to the health of adolescent girls and young women, especially in rural areas across the Region. Irrespective of efforts of government, the health needs of women and girls in rural areas are often neglected, compared to the needs of those in urban areas, and their access to health services is often too low. Women and girls, in particular, encounter numerous constraints in accessing affordable, adequate health services in rural areas.

**Objectives**
The focus of this paper is on identifying challenges related to health issues during menstrual cycles of rural women and adolescent girls.

**Materials and methods:** This paper is based on secondary data.

**Discussion**
The paper discusses the various measures to improve status of rural health scenario and contribution of marketing towards this.

**Conclude:** Paper concludes with best practices to overcome health issues in rural India.

**Infertility Observed in A Community Study “Stree Arogya Shodh” A Women’s Health Program in Goa, India**
Sulochana Suresh Pednekar, Sheela Gupte, Bernadette Pereira, Vikram Patel
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**Keywords** Reproductive Health, Infertility Problem

**ABSTRACT**
The components of reproductive health includes the domains relating to healthy child-bearing, fertility regulation, and maintenance of a healthy reproductive system. A desire to have one’s own child is a universal phenomenon among married couples, and women have to face a lot of problems related to reproduction.

**Aims/Objectives:**
To study the prevalence and to find the probable causes of infertility among women in this study area. The objectives are:
- to study the prevalence of primary and secondary infertility, the biological causes and mental health factors associated with infertility.

**Material & Methods:**
“Stree Arogya Shodh” a community based project in which 3000 women aged18- 50 years were randomly selected from 9 rural villages. From 3000 randomly selected women 1750 are married women who were part of the study. All married 1750 women were asked the questions on infertility. Data on married women is used to present this paper.

**Results & Discussion:**
Of the 1750 women, 8.8% complained of having a problem in conceiving. From this 67 women were identified as having primary infertility and 87 women were identified as having secondary infertility. 94 women have been identified as childless in this study community. There is a strong association found between women who have infertility and sexually
transmitted infection. Infertility is higher in women who have experienced physical, sexual and verbal abuse from their partners.

**Conclusion**: Infertility causes stress in women’s lives more than men as they face problems in society. In order to help women with infertility problem and lessen their burden, special treatment facilities should be incorporated in reproductive health programs in addressing the health needs of such women. Also, future research to explore the causes for rising infertility problem and intervention to overcome the problems of declining fertility rate.

**Nutrition Knowledge of Reproductive Age Group Rural Woman of Tamilnadu an Educational Interventional Study**

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**Keywords**: Nutritional Knowledge, Education and Communication

**ABSTRACT**

Food consumption and health is interdependent, consumption of nutritious food is a major factor to ensure good health which is being influenced by multiple factors like income, food availability, food preference, marketing facility, culture and knowledge. In India, as per the government surveys, malnutrition is the major problem in two ways, over nutrition as well as under nutrition and also micro nutrient deficiency. To understand the problem and to give nutrition education for rural women, a research was carried out with the following objectives.

**Aims/Objectives:**

- To identify the factors affecting food intake in the village population
- To find out the nutrition awareness and behavior about food consumption
- To develop appropriate nutrition education material in regional language

**Material & Methods:**

It is an experimental research design three villages selected as an experimental village and the other three villages considered as control village, the control was not received nutrition education intervention. PMT district of Tamilnadu was selected as a research area. An interview schedule was developed to measure the knowledge and socio-economic details of the respondents. To measure the practice a five point’s scale was used. After the baseline data collection, different communication material was developed to educate them.

**Results & Discussion:**

The selected villages were well connected with roads and transport, in all the six villages, ICDS centre are available. The main facilities like medical, health infrastructure and educational facility are available. It is observed that 88% of the women know about anaemia, at the same time they have knowledge about exclusive breast feeding, introduction of food supplementary food the causes for fever, cold and diarrhea. And regarding the food practice, the staple cereal intake is only rice other cereals and millets were completely neglected. To educate the importance of macro and micro nutrient the communication material such as flip chart, flex chart, m folders and CD-rom was developed. Three time point intervention was given to the experimental villages interpersonal communication uses to bring a good rapport with the respondents. The educational intervention brings changes in cereal intake use of different vegetables and fruits. There was no significant change found in nuts and other millet intake and also in some vegetable intake.

**Conclusion:**

By using different communication aids and interpersonal communication in the form of Lecture and discussion brought changes in some aspects. Improvement in literacy rate, repeated interaction with the community, strengthening the knowledge of ICDS workers, Teachers, and Para-medical staff, training the self-help group women are to be planned properly.

**A Study of Awareness of Janani Suraksha Yojana (JSY) Among ANC Registered Women in a Primary Health Centre of Tribal Area.**

Dr. Vijaykumar Singh, Dr. Smita Chavhan, Dr. Somnath R. Suryavanshi, Dr. R. M. Chaturvedi. Prof. Department of Community Medicine, LTMMC & GH, SION, Mumbai, Maharashtra, India-400022.

**Keywords** JSY, Knowledge, ANC, Tribal

**ABSTRACT**

In an attempt to make primary health care services available, especially, to the poorest and most vulnerable segments of rural & tribal society, JSY forms a crucial component of the NRHM. JSY is a safe motherhood intervention initiated to reduce maternal and neo-natal mortality and increasing institutional deliveries in them.

**Aims/Objectives:**

1) To assess awareness about Janani Suraksha Yojana (JSY) among ANC registered women.
2) To establish association of socio-demographic factors with awareness about Janani Suraksha Yojana (JSY).

**Material & Methods:**

A cross-sectional study was conducted in Primary Health Centre, Khardi, Tal-Shahapur, Dist-Thane. 110 ANC registered
women were interviewed using predesigned questionnaire. SPSS Version 15 was used to analyse the results. Chi-square test was applied & p < 0.05 was considered as statistically significant.

**Results & Discussion:**
Only around half of the women (52.7%) were aware about this governmental scheme & only 17.24% of them were able to answer the correct name of the scheme. They obtained this knowledge mainly from the ANMs (58.6%), AWWs (22.4%) & ASHAs (17.2%). Only 54.5% women had the knowledge about the components of JSY. Poor socio economic class, backward caste (SC/ST) & skilled /unskilled type of occupation were found to be significantly associated with the presence of knowledge about JSY.

**Conclusion:**
As the knowledge is very poor among women in rural area it is necessary to make them aware of the scheme so that they can get benefit of the same.

**Reproductive Tract Infections Among Married Women in Rural Maharashtra**
Dr. Smita Santosh Chavan, Dr Shantha Sankaranarayanan Assistant Professor, Department of Community Medicine, Lokmanya Tilak Municipal Medical College, Sion, Mumbai, Maharashtra, India.

**Keywords:** RTI/STI, Rural, Married

**ABSTRACT**
With reference to the International Conference on Population and Development (ICPD) held in Cairo in 1994, & WHO for ‘Syndromic management’ of reproductive tract infections, the present community based interventional study was carried out in the tribal area of Thane district of Maharashtra in India.

**Aim:**
To study the reproductive tract infections among ever married women of reproductive age group (15-49yrs).

**Objectives:**
1. To study socio-economic, demographic and fertility characteristic in study population. 2. To assess knowledge, attitude and practices about reproductive health of these women. 3. To find out RTI/STI symptoms among study population. 4. To screen symptomatic women for reproductive tract infections.

**Material & Methods:**
A stratified random household sampling was done for this interventional study, in the catchment area of Primary Health Centre, Parol under Thane district of Maharashtra. 10% of the total no. of Ever married women (i.e.415) in reproductive age group were studied.

**Results & Discussion:**
263 (63.4%) women had one or more symptoms of reproductive tract infections. Vaginal discharge in 56.9%, burning micturition in 42.9%, genital itching in 44.6%, genital ulceration in 16.6%, and lower abdominal pain in 42.4% women. 197 (75%) symptomatic women underwent examination and investigation. Clinically 35% were diagnosed for cervicitis, 15.2% for pelvic inflammatory disease. On Laboratory diagnosis, bacterial vaginosis was present in 19.8%, Candidiasis in 31%, active infection with gram negative rod and bacilli in 37% women. No women was found VDRL reactive. 2 (1%) women found HIV positive. Illiteracy, labour work, low socioeconomic class, reused clothes for menses, age at marriage & child bearing, home delivery & low level of knowledge about reproductive & sexually transmitted infections were significantly associated with the infections.

**Conclusion:**
RTI/STIs prevalence is upto 40% in married women in rural areas & remain unnoticed so routine screening programmes are needed will also help to control HIV transmission.

**Maternal Intake and Birth size in Mothers from Low Socio Economic Classes in Pune, India**
Mrs Swati S Raje, Dr. Shobha Rao

**ABSTRACT**
Maternal intake and birth size in mothers from low socio economic classes in Pune, India. Better understanding of relationship of birth size and maternal nutrition is essential for panning effective intervention to improve birth weight of Indian babies especially from low socio economic classes. We conducted a cross sectional study in semi urban area of Pune, Maharashtra and studied 437 pregnant women who registered before 20 weeks of gestation and visited the hospital for regular check up till delivery. Data on maternal (weight, height, bodyfat) and neonatal (weight, head circumference-HC) anthropometry and habitual food pattern (food frequency questionnaire-FFQ) was collected. 66.4% of mothers never drank milk while green leafy vegetables were consumed by only 32% of the mothers. Lentils which are major source of proteins in vegetarian diet were consumed by only 50% of mothers on daily basis while fruits were consumed by about 42.8% mothers. Daily calorie intakes were inadequate (39.3% having <60% of RDA) while protein and fat requirement were relatively a dequate. Mothers in the lower tertile (<1400Kcal) of the calorie distribution had babies with significantly low birth weights (2476+271g) and lower HC compared to those in the higher tertile (>1875
Kcal) 2613±324g. Consequently risk of LBW was 2.7 times higher for mothers in the lower tertile of intake. Trends were similar for protein and fat intake. Weight, bmi, and body fat at registration were significantly negatively associated with total weight gain during pregnancy but were significantly positively associated with birth weight and head circumference of the newborn. Thus undernourished mothers although gained more weight during pregnancy, were not able to spare it to the fetus resulting in a LBW baby. Our study thus indicates that efficacy of maternal interventions during pregnancy may depend on prepregnant nutritional status and efforts are also required to improve it to address the problem of LBW in India.

**Women Self Employment Through Children Nutrition**

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**Keywords:** Onfarm trial, anthropometric measurements

**ABSTRACT**

Ensuring adequate quantity of food along with sufficient nutrients is very important among women and children for building up the national prosperity. Malnutrition is still a malady exiting children of low income groups and tribals. Proper mix of nutrients could be ensured through mixing locally available food resources to provide low cost high value nutritive food supplements. Nutrimix developed by KVK, CPCRI Kasaragod provide balanced nutrition to the children and also to generate income for women shelf help groups (WSHGs).

**Aims/Objectives:**

• To provide nutritious supplementary food to adolescence
• To reach the remote areas in a convenient package through WSHGs
• Income generation to Women self help groups
• To set up gender equality in thier family

**Material & Methods:**

On farm testing of nutritional supplements among the children in Anganwadis, 1000 samples of the nutrimix powder were distributed through Anganwadis and health centres. Frontline demonstration of the technology was conducted at Bedadka panchayat. Results were further scaled up through extension activities. Functional link ages with Kudumbasree mission of Kerala for involving WSHGs for income generation activity. Continuous technical support and up gradation of skills through KVK experts.

**Results & Discussion:**

Nutrimix was highly organoleptically acceptable among children, Anganwadiworkers and WSHGs in Madikai and Bededka panchayats. After consuming nutrimix for 6 months, Anthropometric measurement of children by doctors from local Public Health centre showed good results in height and weight of low birth weight children. Kreehi nutrimix unit, Bededka become first master training centre in Kerala where from training were imparted to about 894 trainees from all over Kerala. BC Ratio for the production of 2500kg of Nutrimix per month was 2.01. During 2007 four master training centers’ were established in Kasaragod, Kozhikode, Palaghat and Alappuzha for the training of personnel to establish units in 60 blocks across Kerala. Presently 398 units are functioning successfully. The total production of Amrutham nutrimix in Kerala state is 1, 267 tonnes/month during 2011 and 35000kg / month of Amrutham nutrimix being produced in Kasaragod districts only The women were shifted from beedi work to the new enterprise and now earns a regular monthly income of Rs.4500 to Rs9000.

**Conclusion:**

Future plan is Production of Amrutham nutrimix for 20,000 tonnes annually, 500 units providing employment to 2500 women, total investment to the tune of 12 crores through Kudumbasree. Empowering more WSHGs for the production of supplementary food for adolescence girls, pregnant women and lactating mother under ICDS schemes.

**Prevalence and Biosocial Correlates of Primary Infertility in Rural Field Practice Area of Kempegowda Institute of Medical Sciences, Bangalore**

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**Keywords:** Infertility, Contraception, Correlates, Family

**ABSTRACT**

Infertility is a global health issue, affecting approximately 8-10% couples worldwide. The world health organization estimates that 60 to 80 million couples worldwide are currently suffering from infertility.

**Aims/Objectives:**

1. To estimate the prevalence of infertility in study population
2. To describe the socio demographic characteristics of study subjects
3. To describe the biological and social factors associated with infertility

**Material & Methods:**

Study was conducted in rural field practice area of KIMS, Bangalore. House to house survey was conducted and
prevalence of infertility in study population was estimated. One of the PHC in our rural field practice area was selected randomly. All the households in that particular PHC were included. In the present study, infertility was labeled primary if the couple had never conceived despite cohabitation and exposure to the risk of pregnancy.

Results & Discussion:
Infertile couples were reported from all the religions. Family History of infertility is significantly correlating with primary infertility. There is negative correlation between infertility and us age of contraception.

Conclusion:
Our findings may highlight the importance of infertility as a public health issue. The data may be used to plan future reproductive health programmes in the region.

Induced Abortions and Concurrent Adoption of Contraception.
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Keywords: Abortion, Contraception, Medical Termination of Pregnancy(Mtp)

ABSTRACT
The MTP (Medical Termination of Pregnancy) Act permits termination of pregnancy for a broad range of social and medical reasons including saving the life of the woman or to terminate a pregnancy resulting from rape or one that will result in the birth of a child with physical or mental abnormalities. The present study was undertaken to study the factors influencing induced abortions and concurrent adoption of various contraceptives, since many previous studies showed that there is unmet needs of contraception among MTP seekers.

Aims/Objectives:
1. To describe the socio demographic profile of the abortion seekers. 2. To describe the factors influencing MTP. 3. To describe various contraceptives following induced abortion.

Material & Methods:
62 Females who have undergone MTP at the OBG department, KIMS Hospital & Research Centre from January 2012 to July 2012, who were available for follow up were included in the study. The detailed information was collected using pretested & structured questionnaire.

Results & Discussion:
Majority (50%) of the abortion seekers were between 18-25 years & 8.1% among them were unmarried, 43.5% were nulliparous & 21% had previous MTP. The major factors influencing MTP were socio economic (33.9%) & eugenic (32.2%). Other influencing factors were contraceptive failure (16.1%), medical (9.7%) & humanitarian (8.1%). 35(56.4%) adopted various contraceptive methods which included tubectomy, Cu-T, Oral contraceptive pills & barrier methods after MTP.

Conclusion:
Socio economic & eugenic factors mainly influence the induced abortions. More than half of them adopted contraceptive methods following induced abortion which shows that there was a definite unmet need among these MTP

Study of Unmet Need for Family Planning Among Pregnant Women Attending Antenatal Clinic of Primary Health Centre, Kengeri, Bangalore
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Keywords: Unmet Need, Family Planning, Contraceptive Methods.

ABSTRACT
According to National Family Health Survey- III about 12.8 percent of currently married women in India have an unmet need for family planning. It poses a challenge to family planning programme to reach and serve millions of women whose reproductive attitude resembles those of contraceptive user, but for some reason not using contraceptives. It is important to know the reasons for unmet need to provide better family planning services. Hence the present study was undertaken.

Aims/Objectives:
According to National Family Health Survey- III about 12.8 percent of currently married women in India have an unmet need for family planning. It poses a challenge to family planning programme to reach and serve millions of women whose reproductive attitude resembles those of contraceptive user, but for some reason not using contraceptives. It is important to know the reasons for unmet need to provide better family planning services. Hence the present study was undertaken.

Material & Methods:
This descriptive study was conducted among 523 pregnant women attending Antenatal clinic of 2 Primary health centres,
Kengeri attached to Kempegowda Institute of Medical Sciences, Bangalore from September 2011 to March 2012 using structured questionnaire by interview technique.

**Results & Discussion:**
In the present study out of 523, 367 (70.1%) were aware of family planning methods, 76 (20.8%) used family planning methods. Among them majority 30 (39.4%) used barrier methods. The extent of unmet need was seen in 122 (23.3%). Among them, 99 (81.0%) had unmet need for spacing the birth and the remaining 23 (19.0%) were for limiting. Majority (57.10%) of unmet need women were in the age group of 20-24 years. The main reasons for unmet need were opposition by family members 39 (46.42%), fear of side effects 23 (27.38%), lack of awareness about contraceptive methods 21 (25%), fear of sterilisation operation 14 (16.66%), fear of not conceiving in future 13 (15.47%).

**Conclusion:**
The unmet need among pregnant women was found to be 23.3%. Proper communication and counselling to women and their family members of family planning methods will reduce unmet need.

**Urban – Rural Performance of a maternal social security scheme Janani Suraksha Yojana (JSY) and Universal Immunization Programme (UIP) in Central India.**
Dr Shilpa P Lanjewar, Dr Sanjeev M Chaudhary, Dr Sanjay S Kubde1, Dr Prakash R Bhatkule4, Dr Harsha Meshram51. Associate Professor, IGGMC, Nagpur, 4. Professor GMC Akola.5. Junior Resident, Department of PSM, IGGMC, Nagpur.

**Key Words:** Janani suraksha yojana (JSY), Universal immunization programme (UIP), evaluation, urban, rural, tribal

**ABSTRACT**
JSY, a social security scheme launched by Government of India to reduce MMR by promoting institutional deliveries in 2005 is currently in the stage of evaluation.

**Aims/Objectives:**
To evaluate and compare the performance of the Janani Suraksha Yojana (JSY) and Universal immunization programme (UIP) in two eastern districts of Maharashtra, Central India.

**Material & Methods:**
It was a cross-sectional study conducted in two districts of Maharashtra during July-September 2010 among JSY beneficiaries (delivered in 2009) and children born in calendar year 2008 by stratified random sampling in five strata viz. Tribal, Non tribal, Council, Urban- slum and Urban non-slum.

**Results & Discussion:**
District-1: out of 130 women, 53 were eligible and 30 (57%) received full JSY benefit; 16 (53%) received JSY benefit within 7 days, 125 (96%) were institutional deliveries, 110 (81.48%) children were fully immunized.

District-2: Out of 109 women, 47 were eligible and only 30 (64%) received full benefit, 16 (53%) received benefit in 7 days, 95 (87%) deliveries were institutional, 95 (84%) children were fully immunized. More women from rural area (85.29%) actually benefitted than women in urban area (46.96%) which was statistically significant ($\chi^2 = 13.73$, df = 1, P = 0.0002).

**Conclusion:**
JSY scheme though functional, amongst the beneficiaries who availed the cash benefit only half of them received it within 7 days. The scheme was very well taken by rural strata as compared to urban (urban-slum). Majority of children even in tribal were fully immunized.

**Effect of Literacy on Family Planning Practices Among Married Women in Rural South India.**
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**Keywords** Family Planning, Contraception, Female Literacy, Facility Based

**ABSTRACT**
India is the second most populous country in the world with more than a billion people. Government of India is providing a wide range of family planning services for free in all public health institutions. Few studies in India have tried to examine the role of female literacy on contraception usage.

**Aims/Objectives:**
This study aimed to determine family planning related knowledge and practices and their association with female literacy among married women.

**Material & Methods:**
Facility based cross-sectional study was done among married women aged 15-45 years attending outpatient department of three primary health centres namely Kallanthiri, Chekkanoorni, and Poovandi in the district of Madurai in Tamilnadu during December 2009 in rural Tamilnadu. Assuming the prevalence of contraceptive usage to be 50%, for a power of 80%, alpha error of 5%, and an absolute precision of 10%, the sample size was calculated as 100. Data were collected using pretested semi-structured questionnaire by convenience sampling technique. To assess the FPK, a composite score
was calculated based on 5 variables. The final score was categorised into satisfactory and unsatisfactory based on a cut off of 80%.

**Results & Discussion:**
A total of 100 women participated. Fifty nine percent had satisfactory FPK. Contraception prevalence rate for modern methods was 60%. Eighty percent had ever undergone abortions and among them, one fifth had undergone uncertified abortions. With increase in the literacy status, proportion having satisfactory family planning related knowledge increased (p <0.001) and the parity decreased (p <0.001). More literate women were using contraception, had undergone sterilization, had undergone certified abortions and had less male child preference compared to illiterate women.

**Conclusion:**
This study offers evidence that promotion of female literacy could be considered a strategy for promoting contraceptive usage and addressing population growth in India.

**Exploring Women’s Health in Rural India: Evidences from Large Scale Study**
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International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai, Maharashtra, INDIA

**Keywords:** General and Reproductive health, Body Mass Index, Reproductive Tract Infections

**ABSTRACT**
Although half of the humanity is women yet they have remained marginalized in developing countries and especially in India. Indian patriarchy system and traditional mindset had never allowed women issues to acquire centre stage even in health matters. Negligence of women health has far reaching effect on both women and household level. There is dearth of studies that have well documented the health issues of women in rural India.

**Aims/Objectives:**
This study looks at the various aspects of general and reproductive health of women living in rural India and their level of awareness on several health issues.

**Material & Methods:**
Present study has utilized data from the third wave of two national representative large scale survey i.e. National Family and Health Survey (NFHS-3, 2005-06) and District Level Household and Facility Survey (DLHS-3, 2007-08). Appropriate bi-variate and multivariate statistical techniques have been employed to analyze survey data.

**Results & Discussion:**
Results show the high prevalence of anemia among rural women of the country as more than half women are anemic in rural areas. Though chronic energy deficiency is usually indicated by body mass index (BMI) of <18.5, women in rural areas has slightly higher mean BMI (around 19 percent), indicating the improved situation but still it needs attention. Reproductive health of women in rural India also needs consideration. Nearly, 14 percent of women reported abnormal vaginal discharge and 20 percent had reported symptoms of reproductive or sexually transmitted diseases (RTI/STI). The study also high lights the poor knowledge of women on nutrition, reproductive tractinfections and other diseases in rural India.

**Conclusion:**
The study emphasizes to prioritize the health needs of women in rural India who often neglect their general and reproductive health mainly because of neglect, shame and stigma attached to it. Thus, there is a need to provide proper education and awareness among them through targeted interventions.

**A Cross Sectional Study of Socio-Demographic Pattern of Women of Reproductive Age Group With Reference To Family Welfare Goals - The Challenge Persists**
Dr. Rakesh Balaji Waghmare, Dr. S.S.Bansode-Gokhe, Dr. R.R.Shinde, Dr.S.AacharyaSeth G.S.M.C. & K.E.M.Hospital, Mumbai, Ms, India.

**Keywords** Reproductive Age Group Woman

**ABSTRACT**
Early marriage in India has been practiced for centuries, with children married off before their physical and mental maturity. The problem of child marriage in India remains rooted in a complex matrix of religious traditions, social practices, economic factors and deeply rooted prejudices. Every year, an estimated 10 million girls worldwide are married before they turn 18, usually with no say in when or whom they marry. Child marriage almost always cuts girls’ education short, trapping them and their children in poverty. It often leads to early pregnancy and child birth, putting girls’ lives and health at risk.

**Aims/Objectives:**
To study existing socio-demographic pattern and determinant of reproductive health among women in age group of 15-45 years and the extent of achievement of selected family welfare goals in the study settings. To analyze the implications and challenges of the study findings and also to evolve practical in sight for long term interventional
Material & Methods:
It is a cross sectional study, conducting over a period of six months from March to August 2012 in Malavani Malad Mumbai, Urban field practise area of PSM department, Seth GS Medical College & KEM Hospital on 382 women between the age group of 15-45 years, study samples is being selected by convenient random sampling method who will visit the urban health centre. Data collection with help of predesigned, pretested Proforma by face to face interview technique and will be analyzed using SPSS software Version 17.0

Results & Discussion: Study is in progress, Results are awaited and will be discussed in the conference.

Conclusion: Study is in progress, Conclusion will be discussed in the conference.

Contraception Awareness and Practice in ANC Mothers
Dr. Nikunj Fofani, Dr. Sunita Shanbhag, Dr. R.R. Shinde, Dr. Shrikala AcharyaSeth GS Medical College,Mumbai.

Keywords: Knowledge, Use, Contraception, ANC Attendees

ABSTRACT
Contraception has been a single most important intervention to reduce burden of unwanted pregnancy and promote healthy living among young women. In associocultural setting like India, promotion of contraception and access to it among young adults is very limited.

Aims/Objectives:
To assess level of awareness of contraception and its use in past in ANC attendees in a rural maternity home. To find out the reason for using contraception. To find the proportions of various types of contraception used.

Material & Methods:
All pregnant women attending ANC clinic at Mandavi maternity home, under Bhatane PHC, in 3 months duration (January-12 to March-12) were selected and questionnaires were administered by personal interview method.

Results & Discussion:
Majority of the respondents were 21-30 years old (61.87%). 61.15% were primipara. 93 out of 139 (66.90%) women had heard about contraception, while only 30 out of 93 (32.25%) of the respondents had practiced contraception previously any time, of which the OC pills (56.66%) were the most commonly practiced methods. • Influence of elderly persons (58.49%) and Fear of side effects (20.75%) are the most common reason for not using contraceptive methods in spite of being aware about it. • 61.97 %(86) women were not in favour of their husband being counseled regarding family planning.

Conclusion:
This study reveals level of awareness of contraception needs to be intensified through specific groups & public education campaigns emphasizing the benefits and safety of modern contraceptive methods. Such activity must involve decision makers of the house regarding contraceptive method. Empowerment of the couple for decision making will facilitate adoption of contraceptive practices.

Women of Reproductive Age Group in a Rural Area of Jammu
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Keywords: Contraception, Couple Protection Rate, Unmet Need

ABSTRACT
National Family Planning Programme was launched immediately after independence yet the population control remains a big challenge in India. The extent of acceptance of contraceptive methods still varies within societies. In many parts of India especially rural area the choice about the type of contraceptive use depends mainly on female’s husband and in laws. Availability of contraceptives at the hour of need is the major issue in addressing the unmet need in contraception.

Aims/Objectives:
To find the prevalence of contraceptive use, unmet need and choice of contraceptive method among reproductive age women in a rural area of Jammu district.

Material & Methods:
A descriptive cross-sectional study was conducted in a randomly selected village. House to house survey was done and in each house currently married females of reproductive age group were interviewed. A pretested, prestructured questionnaire was applied. The total population of village was 785. Overall 157 females were interviewed

Results & Discussion:
Majority of females (77/157) had two children while 42 (26.75%) females had>2 children. 63.05% females agreed with the two child norm. 83.43% of females were of opinion that the ideal gap between two children should be>2yrs. 86% (129) wanted to adopt some method of contraception of which 70% (106) were using one or the other method of contraception hence unmet need of contraception came out to be 16%. Tubectomy was the most preferred choice of
family planning (36.79%)

**Conclusion:** Vigorous information, education and communication activities is the need of the hour to increase the participation in adopting Family Planning methods

**Prevalence of Unmet Need for Contraception and Predictors of Non Usage of Contraceptives in Rural Haryana.**

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**Keywords** Maternal Child Health; Utilization; Rural Area.

**ABSTRACT**
Measurement of the prevalence of unmet need and analysis of factors associated with non usage of contraceptives can inform the family planning program so that services can be tailored according to evidence based need of the women.

**Aims/Objectives:**
To measure the prevalence of unmet need for contraception among married women of reproductive age group (15-49 years), to study the factors associated with the non usage of contraception and predictors of unmet need in rural Haryana.

**Material & Methods:**
The present cross sectional study was carried out in the rural field practice area of department of community medicine, MMIMSR, for a period of 6 months from 1st December 2011 to 31st May 2012 using DHS questionnaire among 650 married women between 15 and 49 years. Nine villages were selected from 83 villages using two stage sampling technique. Regression analysis was used to predict factors of unmet need.

**Results & Discussion:**
The cumulative unmet need for contraception is 9.41% (95% CI 7.6-11.6) of which 4.35% (95% CI 3.2-5.9) is for limiting and 5.06% (95% CI 3.8-6.7) is for spacing. Most common reasons cited by never user’s contraceptive group were, want to become pregnant (33%) and lack of knowledge about contraceptives (27%). Top 3 reasons for not using a contraceptive method at any time in future were, fear of side effects (42%), infrequent sex (36%) and opposition from husband (31%). The predictor variables that were significant negative predictors of unmet need after controlling for other factors were: housewife and employed, parity greater than two, and age greater than 30 years.

**Conclusion:**
Specifically targeting women who are fit for spacing and encouraging them to space their second and later children would be a worth while option in family planning practice for the population.

**Risk Factors for Utero-vaginal Prolapse - A Community Based Study from Doti District of Nepal**

Damaru Prasad Paneru, Department of Public Health, School of Health and Allied Sciences, Pokhara University, Nepal/ KLE University, Belgium Karnataka ( PHD scholar)

**Key Words:** Prevalence, Utero-vaginal prolapse, risk factors, Doti

**ABSTRACT**
Utero-vaginal Prolapse is a very common condition among women and occurs when the pelvic floor muscles become weak. It is wide spread problem in Nepal. Nevertheless, exact burden of the problem is unknown.

**Aims / Objectives:**
To estimate the prevalence and identify the risk factors for Utero-Vaginal Prolapse among the women of the Doti district who have experienced at least one time pregnancy during her life time.

**Material & Methods:**
This was a community based cross sectional study, conducted among 360 women. Three stage probability sampling was followed. First, random selection of two Village Development Committees (VDC) from each of six clusters (1 cluster=10 VDCs). Then, three wards form each selected VDC and 10 participants from each ward were chosen randomly. Data were collected by face to face interview using pre-tested and structured questionnaire and analyzed by statistical package for Social Sciences (16 Version). Chi square, R2 and Odds Ratio were calculated. Study was conducted during January to March, 2010.

**Results/Discussion:**
Prevalence of UVP was found to be among 35.5% women by Symptomatic approach. Family size (>5), age at marriage (<20 years), illiteracy, age (>35years), parity (> 3), early resumption of work during post partum and health problems during post partum period were identified as risk factors for UVP(P<0.05). Coefficient of Multiple determinations (R2) showed; type of delivery, age at marriage, numbers of children, parity, age at first child birth explain 40% variation in UVP where as 18.6% variation was explained by parity only.

**Conclusion:** UVP was observed to be 35.5% women. Limiting numbers of pregnancies, birth interval (>4 years) and appropriate planning for delivery are recommended to prevent from UVP.
An Epidemiological Study of Reproductive Tract Infection Among Women of Reproductive Age Group in Rural Health Training Centre Area, Palawa, Ujjain [M.P.]

Pal Rabindra Kumar, Rabindra K. Pal1, Baghel N2., Chaurasiya S3., Mehta S.C4. 1. Postgraduate student. 3. Assistant Professor, Dept. Of Community Medicine, 4. Professor& Head, Dept. Of Community Medicine R.D. Gardi Medical College, Ujjain (M.P.) 2. PHD Student, Vikram University, Ujjain (M.P.)

ABSTRACT
Female are the major victims of sexual and reproductive illness and have lesseropportunities for basic needs of health care and human rights. Majority of women in India continue to suffer from reproductive tract infections, resulting into PID, Salpingitis, Pelvic adhesion, Infertility, cervicalcancer, chronic pelvic pain and Prolapse.

Aims And Objectives-
(1) To assess the magnitude of problem of Reproductive tract infection among females of reproductive age group 15-45 years. (2) To study the association of potential risk factors with RTI. (3) To study the knowledge, attitude and practices regarding RTI among women 15-45 years.

Methodology-
Study design- cross-sectional study.
Study place- 60 Villages (catchment area) of Rural Health Training Centre, Palwa, Ujjain [M.P.].
Method- Keeping in view the prevalence of RTI in INDIA among women a sample size of 600 is obtained. An exploratory visit will be made to prepare a spot map of the villages and house to house visit will be made for information regarding the related variables of the study will be collected by using pre-structured, predesigned, pretested Proforma. Proforma also include information regarding religion, caste, type of family, relationship with head of family, demographic profile, marital status, literacy and socioeconomic status, any social pathologyand residential environment.

Results:
Result will be analysing by applying appropriate statistical methods by using SPSS 16 keeping in view the aim and objectives of study.

Gender Preference and Awareness on Sex Determination Among Married Woman in Ranchi.
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Keywords: Awareness, Married woman, Sex determination, PNDT

ABSTRACT
Sharp decline in sex-ratio has been observed in India resulting in 40-50 million missing girls since 1901 which cannot be explained by migration, under countor biologically-ordained differentials at birth alone. As per NFHS-II estimates, 6-17% female fetuses are aborted each year by misusing the pre-nataldiagnostic tests (PNDT).

Aims/Objectives:
The study was undertaken to know the extent of preference for male child and socio-demographic factors associated with it, awareness regarding PNDT techniques and laws governing them and attitude of study subjects regarding practice of PNDT.

Results & Discussion:
Preference for male child was higher in rural respondents (66.7%) as compared  to urban respondents (35.29%). Education, religion, caste and birth order had effect on gender preference. Majority of respondents (70.59%) were aware of sex-determination techniques. Awareness about USG as technique for PNDT was universal, while only 5.5% had knowledge about amniocentesis. Mainsources of information about sex-determination were media (72%) and friends/relatives/neighbours (50%). 2/3rd of subjects were aware of place where sex-determination could be carried out. 61% of them had also knowledge about existing laws on PNDT. Rural respondents (60%) were more willing for sex-determination compared to urban counterparts (37.5%).

Conclusion:
There is high son-preference and good knowledge regarding sex determination. Laws governing PNDT and penal provisions must bedisseminated and enforced effectively.

Assessment of Labour room Protocols in Urban and Rural Health Facilities.

Keywords: Human Resources, Infrastructures, Labour room practices, Quality health care.

ABSTRACT
To reduce MMR and NMR quality health services plays an important role. NRHM addressed both by improving an infrastructure facilities, human resources by starting BEMOC and CEMOC, IMNCI and 24/7 PHCs, strengthening the 1st
referral units. Present MMR-153 per 1 lakh live birth and IMR is 49 per thousand in Andhra Pradesh.

**Aims and Objectives:**

**Aim:** Assessment and evaluation of infrastructure, human resources and labour room protocols in Urban health facilities of Tirupathi and Govt. Rural health facilities of Chittoor dist. **Objectives:** 1. To assess the infrastructure and resources facilities in the labour room of Urban health facilities in comparision with the Govt. Rural health facilities i.e., PHCs and CHCs. 2. To assess the availability of trend human resource i.e., OBG specialist, pediatrician, anesthesist, in rural and urban facilities. 3. To assess the labour room treatment practices of both urban and Govt. rural health facilities.

**Materials and methods:**

**Location:** Chittoor Dist. **Study Design:** Cross sectional, qualitative study Direct observations and indepth interviews using semi structured questionnaires was undertaken. Random sample size – 14 private nursing homes and 1 teaching hospital in Tirupati and 15 Govt. health facilities i.e., 12PHCs, 2 area hospitals and 1 CHCs included in the study.

**Results and Discussion:**

1. Severe shortage of Human Resource in Govt. Rural health facilities. 2. Irrational and unequal distribution of human resources. 3. Disparity in training programmes, handson workshops, CME programmes for doctors working in Govt. health facilities. 4. Inadequate infrastructure i.e., OT, Labour room equipments, drugs, consumables and staff quarters. 5. Ignorance of labour room protocols in Govt. health facilities. Urban health facilities are well equipped in terms of human resources and infrastructures.

**Conclusion:**

Requirement of trained personnel, rationalization of staff working in various health facilities, to update the clinical knowledge and skills, CME training programmes undertaken. To improve the equipment i.e., OT, Labour room equipments, drugs and staff quarters. Staff should be sensitized to follow the labour room protocols.

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**Maternal and Child Health Services Utilization in A Rural Area of North Kerala**


**Keywords:** Maternal And Child Health

**ABSTRACT**

The health of the mother and child constitutes one of the most serious health problems affecting the community, particularly in the developing countries. The utilization of MCH services is better in Kerala as compared to India, except for certain pockets like Muslim predominant areas. In this study we have attempted to study MCH service utilization in a rural area of Kerala, which has predominant Muslim population.

**Aims/Objectives:**

To assess the Maternal and child health services utilization in a rural area of North Kerala

**Material & Methods:**

A community based house to house survey was conducted to assess the utilization of maternal and child services in two wards out of 20 wards in Madayai panchayat, Kannur district of Kerala. The information was collected through personal interview using a pre tested questionnaire. The main indicators used to assess MCH services in this study are family planning practises, antenatal care and immunization. Total houses included in the study were 158.

**Results & Discussion:**

The study area constituted of Muslim population. Complete (100%) antenatalcare was received by all the pregnant women. All the deliveries were institutional. Out of 15 children between 1-2 years of age 13(80%) were fully immunized.

The eligible couples in our study population were 244 out of which 105 (43%) had 3 or more children. Only 83(34 %) couples were practicing family planning methods. Most of them (79.71%) practised permanent sterilization, but only 12.7% adopted this after having 2 children. The main reason for not using family planning method was desire for more children (43.4%) and religious belief (25.4%).

**Conclusion:**

Though the utilization of antenatal, natal and immunization services in the area were adequate, the uptake of family planning practises were low when compared to state statistics.

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**Child Health**

**Screening for Nutritional Status as a Tool for Reducing Morbidity of Growing age Children in Delhi**

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**Keywords:** Nutritional Status, Anthropometry, Bmi, Growing Age
ABSTRACT
Malnutrition limits development and the capacity to learn. It also costs lives, about 50 percent of all childhood deaths are attributed to malnutrition. Malnutrition in early childhood has serious, long-term consequences because it impedes motor, sensory, cognitive, social and emotional development.

Aims/Objectives:
The objective of the study was to determine the nutritional status of 5-14 years school age children in a resettlement colony of Delhi.

Material & Methods:
A total of 869 school age children were screened. Data was collected on anthropometry. Haemoglobin levels of children were estimated by Haemocue instrument.

Results & Discussion:
Data on anthropometry revealed that out of total children screened (N=869), mean height and weight in all the age group was significantly (p<0.05%) less than the NCHS standards. Hemoglobin test revealed that 64% had anaemia that is Hb below normal (12g/dl). Approximately half (49.3%) were mild anemic, 13.4% were moderate anemic and four children (0.5%) were. Feeling breathlessness and easily tired were experienced by 26.5 and 29.3% of the subjects respectively.

Conclusion: Regular anthropometry in school age children should be mandatory

Is Therapeutic Non-Thermal Ultrasound Effective on Post-Partum Symptomatic Breast Engorgement?
Dr. Keerthi Rao, Associate professor College of Physiotherapy, PIMS, Loni

Keywords: Breast engorgement, Six point engorgement scale, Ultrasound.

ABSTRACT
Background and Objective To study the effect of therapeutic non thermal ultrasound in post partum breast engorgement.

Methods
Forty postpartum women with breast engorgement were included for the study after obtaining consent, which were referred from the OBG department of Pravara Institute of Medical Sciences, Loni. They were randomly assigned to experimental and control group constituting of twenty subjects respectively. All the subjects in both the groups underwent evaluation for engorgement. It included assessment of Visual Analog Scale (VAS) for pain and Six Point Engorgement Scale (SPES) for engorgement. Both the groups underwent treatment for engorgement which consisted of massage, manual expression of milk and advice on appropriate latching technique for period of two days successively. The experimental group was additionally intervened with therapeutic non thermal ultrasound.

Results
Statistical analysis was done day wise within both the groups and between the groups. The results indicated that there was significant relief in VAS and SPES scores with in the groups showing that the intervention done was beneficial. The analysis of baseline data of day 1 and follow up data of day 3 between the two groups indicates that experimental group showed statistically significant relief in symptoms

Interpretation and Conclusion
We conclude from our study that the use of therapeutic non thermal ultrasound for two sittings in two successive days in the treatment of symptomatic postpartum breast engorgement accelerates relief of symptoms as compared to other interventions like massage, expression of milk and appropriate feeding technique

Traditional Beliefs and Practices Regarding Newborn Care Among Postnatal Mothers Residing in Rural Area of Alandi Devachi of Pune District.
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Key words: Traditional beliefs, practices, newborn, postnatal mothers.

ABSTRACT
Child birth is a time of transition and social celebration in many societies, signaling an adjustment of cultural responsibilities. Some traditional practices are beneficial to the mother and baby, where as others are not. Care practices immediately following delivery can contribute to newborn mortality and morbidity, but a package of essential newborn care practices has proven to reduce these risks. The time around childbirth is culturally very important and existing behaviors are commonly rooted in traditional beliefs. An understanding of newborn care is therefore essential for effective behavior change strategies to be developed.

Aim:
To explore local newborn care and practices and to identify beliefs and practices that may be harmful and beneficial in newborn care which will further the outcome of healthy baby.

Materials and method:
The study was carried out among 30 mothers by snowball sampling method. Postnatal mothers within 45 days of delivery
Beliefs and practices:
1. Breast feeding practices: 17% mothers initiated breast feeding within 2 hours of delivery as instructed by health care professionals, however 50% initiated after 2 days as ‘milk was not produced and mother was too tired’ while 33% didn’t give colostrum to baby as they believed that colostrum is not good for the baby. 73% mothers breastfed in sitting position as it was the traditional belief, even though they preferred to lie down and feed. The reason for sitting position was believed that, keeping the neonatal head on mothers palm gave round shape to the head, helped in feeding comfortably, provided support to mother’s back and prevented aspiration in neonate. 63% gave prelacteal feeds like water, honey, coconut water, goat milk or lactogen as per traditional beliefs. All mothers breastfed from both breasts, 97% breast fed from each breast completely before feeding from other breast. 2. Mothers dietary practices: 47% mothers had iron rich Diet and High Protein Diet in antenatal period in addition they also had fruits, coconut water and milk, while in postnatal period 77% had high protein diet in form of meals, special laddoos, milk and ghee. 3. New born care practices: 63% bathed the baby by 2nd day and were bathed daily thereafter as they believed that bath keeps baby’s body clean and prevents infection, while 11% bathed baby as late as after 30 days, 97% gave sesame seed oil massage and also applied to baby’s skull bones as they believed that massage is useful for baby’s skin, keeps the body clean, helps in gaining weight and prevents baby from becoming handicapped, strengthens baby’s bones especially skull bones and prevents common cold to baby. Massage was given by either mother, mother-in-law or dai. 80% gave ayurvedic smoke to baby as it was the traditional belief of elders. 97% mummified the baby as they believed that it kept the baby warm gave comfort, helped baby sleep well and prevented baby from getting cold. All mothers dressed baby in soft cotton clothes as per the traditional belief. 83% babies slept near mother while the rest slept in cradle. 4. Practices during neonatal sickness: All mothers reported that when baby is sick it cries, refuses feeds, feels warm to touch, does not sleep well, baby needs to be carried when ill. 80% mothers continued to breast feed during baby’s illness while others gave cow’s milk. 5. Neonatal immunization: Only 87% gave zero polio dose and BCG dose to baby, those babies who were born at home were also immunized. 6. Beliefs directed practices: 83% mothers believed that their baby should be protected from evil these beliefs were of the elders, family members, mother herself or followed from generation to generation. In order to ward off evil 90% mothers applied a black dot of kajal on baby’s forehead or foot or head, they also tied black thread around baby’s neck, planned to shave baby’s scalp by end of one month, did not give baby to strangers, did not travel with baby far from home, held either salt, chilli, broom, spoon in hand and made a circular motion around baby’s head and threw it in fire to ward off evil. They also kept articles made of iron and leather under newborn’s bed to thwart the evil eye.

Discussion:
Some beliefs were either beneficial or had had no effect on the health of mother or baby. Adherence to practices were based on past experiences of significant others, mother, mother-in-law and elders. What beliefs and practices they followed and how it affected their health was paramount on what they advised to new mothers. Some older people experienced health problems which they related to their behavior. The degree to which this adaptation of practices happen depends upon decision making, gender roles and social support within the family. In the present study most mothers had favourable attitude to gender of the baby.

Conclusion:
Most mothers had good practices even though the beliefs were different. Awareness of the need to continue breast feeding during baby’s illness and the need to follow exclusive breast feeding for six months of age is essential.

Study to Assess the Customs and Cultural Practices Related to Premature Care Among Selected Tribal Community of Ahmednagar: Maharashtra
Mrs. Bhasura Chandrahoo, India

ABSTRACT
Every year an estimated 4 million babies around the world die in the first 4wks of life. In India, 65.4% of all births and 75.3% of births in rural area occur at home. Prematurity and related complications, unhealthy practices, early bathing, delayed breastfeeding are major causes of morbidity and mortality among neonates. Child birth and neonatal period are culturally important times during which there is a strong adherence to traditional practices among tribal population. The prevailing and the dominant understanding say that they are unchanging and resistant to newer innovations. An
understanding of routine practices in the home is necessary in order to design and prioritize interventions to reduce neonatal morbidity and mortality. The present study was conducted at two tribal villages, Panjre and Bhandardara, at Ahmednagar dist.

Objectives:
1. To identify customs and practices related to premature care among tribal community
2. To analyse their harmful practices if any, so that future planning for corrective actions can be taken.

Material and Methods
Method of study: A Qualitative - ethnographic study. Sample and Sampling Technique Sample consists of 30 Tribal women (between the age group of 20-80 yrs) and 2 Anganwadi workers, 2 Dais, 2 ANMS from two tribal villages (Bhandardare & Panjre) of Ahmednagar dist: Convenient sampling Technique was used Tool and Technique Tool consisted of 12 open ended question related to premature baby care Unstructured interview schedule was used to collect the data.

Data Analysis -Qualitative Analysis

Results & Discussions
Demographic data:- Mean age group of women was 39. All of them were married and having children. All of them were illiterate.

Customs and Practices related to care of premature babies:- The tribal women don’t have any concept clarity about problems of premature baby, except few of them knew the babies born early will have feeding problems. The practice of providing warmth to premature babies are different, as making the baby to sleep near fireplace, making the mother to sit with the baby near fireplace and keeping coila litten container under the cot. They don’t give breast milk/colostrum to the baby for 3-5 days. When mother’s milk is not given due to customs, or in case of premature babies who are unable to suck, cotton is dipped in honey, sugar water, jaggery water and feed the baby. Other practices and custom include, giving bath immediately after delivery including premature babies, putting oil, kumkum as well as rath (ash of cowdung) at cord stump, putting oil in the nose, ear & tying black thread as bracelets and anklets. They follow the custom of making hole in the ear at 12th day. They give oil massage to the baby which is a healthy practice. Immunization is followed only because the ANMs make sure that they are immunized. Following customs related to child care was found true on interviewing the ANM, Anganwadi workers, and Trained Dais.

Conclusion
The study reveals that, most of the customs related to newborn/ premature baby care, were unhealthy except the custom of oil massage. Their ideas of giving warmth to baby is good but the methods are dangerous. The study throws light on encouraging them to follow healthy traditions and discouraging unhealthy practices, through health education on healthy and feasible methods in rural set up. Eg-kangaroo mother care for warmth and comfort and to promote breast feeding

‘Gender Equality’ of Primary Immunization Coverage in Rural Area of Maharashtra
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Keywords Immunization Coverage, Gender Equality, Cluster Sampling

ABSTRACT
Routine immunization (RI), being basic service under primary health care, hence along with assessing coverage, it can also be a measure of ‘Gender Equality’

Aims/Objectives:
Aim: Assess Gender Equality of primary immunization coverage in rural area of Maharashtra Specific objectives:
Measure primary immunization coverage; Assess Gender Equality of primary immunization coverage; and Distinguish contribution of government services in RI

Material & Methods:
A cross-sectional study conducted in PHC Karla, under rural field practice area of medical college in Maharashtra using WHO 30-cluster sampling technique. Instead of 7 beneficiaries, total 14 beneficiaries (7 girls and 7 boys) were to be selected from each cluster to assess gender equality. Data could be collected for total 345 beneficiaries, as either, no requisite number of children available or their mothers not available during survey in some clusters. Dates of vaccination noted, if immunization records available and if not, specific questions asked to assess vaccination history.

Study was conducted in Sep – Oct 2011 in birthcohort of 13-9-2009 to 13-09-2010

Results & Discussion:
Of the study population, 171 (49.6%) were females and 174 (50.4%) males. 64.1% had immunization records with proportion of females (69.0%) having records was higher than males (59.2%). Total primary immunization coverage was found to be 80.0%, with proportion in females (82.5%), almost same as males (77.6%). Only one male child was completely unimmunized while others were partially immunized. Missed doses were mainly DPT/OPV3, Hepatitis B3, and Measles. Total 73.9% of children received vaccination from government services, while 15.1% from private and
remaining from both. No statistically significant difference observed gender wise in coverage and availing services from private

**Conclusion:**
Primary immunization coverage in rural area is satisfactory with major contribution from government services. ‘Gender Equality’ is observed in coverage, retention of records and accessing services from private. Thus, there is no neglect of girl child in primary immunization coverage.

**Attitude Towards Disabled Children: A Qualitative Study in Rural Region of Maharashtra**

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**Keywords:** Attitude, disability, qualitative study, rural region

**ABSTRACT**
Bearing respectful, healthy, and "normal" children is expected of most parents. Many times when children are unable to perform a task after many attempts, children and parents get frustrated and standards for children subsequently become lower. Children with disabilities, however, are automatically given lower standards than those without disabilities. There have been efforts internationally to include children with disabilities in the educational mainstream. Inclusive education entails increasing the participation of students, and reducing their exclusion from, the cultures, curricula and communities of local schools. Inclusive education is complex and there are several interrelated factors which affect the process. This was a qualitative study of describing and analyzing the process of educating children with disabilities in rural region of Maharashtra.

**Objective:**
The aim of qualitative study is to investigate what is expected of children with disabilities living in rural region of Maharashtra and what he or she can achieve academically, based on the child and parents goals and perspective and attitude of disabilities.

**Methods:**
Data was collected through in-depth interviews and focus group discussions with stake holder groups, and observations in classrooms. All interview transcripts were analyzed to identify emerging themes and the data were organized, which was done by coding and breaking it down into more manageable texts.

**Results:**
The study confirmed the presence of diverse, multiple and contradictory models of disability drawing from biomedical and local religious, social and cultural constructs.

**Conclusion:** Public awareness, education and community-level interventions for reducing the misconceptions and stigma related to disability amongst children are needed in addition to culturally sensitive treatment methods to improve the attitude towards disability.

**A Study to Assess the Effectiveness of Planned Teaching on the Complementary Feeding Practices Among the Mothers with Children Between 6-12 Months of Age in Selected Rural Areas of Pune District.**

Ms Angela A Joseph DES College of Nursing, Lecture M.Sc Community Health Nursing

**Key Words:** Rural Complementary feeding practices

**ABSTRACT**
At the beginning of this millennium in year 2000, 189 countries and 23 international health agencies had pledged to reduce child under-5 mortality by two-thirds and maternal mortality by three-fourths by 2015. These were called the Millennium Development Goals (MDGs) number 4 and 5. With only five years left for the target year, a clutch of international health agencies and NGOs have come out with “Countdown to 2015 — Decade Report (2000-2010)”. The report, which tracks progress made on these fronts, says that out of 68 priority (countdown) countries accounting for more than 90% of maternal and child deaths worldwide, only 19 countries were on track to meet MDG 4; 17 countries had reduced child mortality by half, while 47 countries had accelerated their progress on child mortality since 2000. At the same time, 49 countries are not on track to achieve MDG 4, while 12 countries (including some currently on track) have seen their progress slow since 2000. India’s rate of under-5 mortality fell from 169 in 1990 to 69 in 2008, averaging an annual rate of decline of just 2.9%. This puts India firmly in the insufficient progress category.

**Aims/Objectives:**
To assess the knowledge and practices of mothers regarding complementary feeding before and after the teaching, and to correlate the knowledge with practices and correlate each of them with the demographic variables.

**Material & Methods:**
A quasi experimental design was used and 60 samples were selected using the convenience sampling technique in the rural area of Nasrapur, Pune. The pilot study was conducted and found that it was feasible to conduct the study. A well structured questionnaire and an observation checklist was prepared to assess the knowledge and practices before and after
the teaching. Validity and reliability of the tool was done. A planned teaching was delivered and the posttest was conducted after a period of 7 days.

**Results & Discussion:**

The characteristics of the demographic variables described the percentage wise distribution of the variables wherein, age of the children was 47% in 10-12 months of age, 53% of mothers having only one child, educational status of 70% of mothers was higher secondary education, 64% of mothers were housewives, 54% had the monthly income in between 1000-5000/- and 98.30% were Hindus. The pretest knowledge and practice scores were poor (SD=3.25 and 1.351851) respectively, the posttest scores improved significantly after the planned teaching (SD=1.443 and 1.103) respectively. The chi square calculated (11.62) and p value (0.0003) showed there is a positive correlation between knowledge and practices. Using chi square the correlation between knowledge and practice with the selected demographic variables was done, which showed that only education was correlated with the knowledge of mothers related to complementary feeding, the other selected variables did not show any correlation with the knowledge and practices of mothers related to complementary feeding.

**Conclusion:**

The knowledge and practices of mothers related to complementary feeding can be improved considerably by educating the mothers related to the same. The implications for nursing education, administration, and research were stated, along with further recommendations of the study which included that a similar study can be done on a larger sample, using an information booklet, using a control group, variables like type of family, number of children, and nutritional status of children can be studied independently and a comparative study can be undertaken to see the differences between rural and urban areas regarding complementary feeding practices.

**A Study of the Husbands’ Involvement in Wives’ Health During Pregnancy & Child Birth in Urban & Rural Areas of West Bengal**

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All India Institute of Hygiene & Public Health, Kolkata

**Keywords:** Pregnancy, delivery, husband, participation.

**ABSTRACT**

Reduction of Maternal Mortality ratio can only be achieved if women are taken well care of their health during pregnancy and child birth. Husbands’ role is immense in this regard. Hence the necessity of this study.

**Objective:**

To know about the level of husbands’ participation in health related activities of their wives during pregnancy and delivery.

**Materials & Methods:**

It is a community and hospital based cross-sectional study. 250 married women of 15–49 years of age with at least one child of below 3 years of age are the participants.

**Results & Discussion:**

84% of women had 3 or more antenatal check-ups. Among them, 65.6% of husbands (60.8% urban & 70.4% rural) accompanied their wives to antenatal check-up at least once. Regarding cause of non-accompaniment, 62.8% (67.3% urban & 56.8% rural) were due to occupational reasons, 26.8% (18.4% urban & 37.9% rural) lack of awareness and 10.4% (14.3% urban & 5.5% rural) lack of motivation. About 31.6% of respondents (28% urban & 35.2% rural) faced complications during pregnancy. The commonest complication faced by the respondents was anaemia in rural area (41%) and antepartum haemorrhage in urban area (37.2%). Only 18% of the husbands (24.8% urban, 13.6% rural) accompanied their wives to health facility during complications. Only 26.8% of husbands (32% urban & 21.6% rural) helped their wives in household work during pregnancy. 60.8% of husbands (69.2% urban & 33.4% rural) encouraged their wives to take adequate rest during pregnancy. 61% of husbands (63.1% urban & 56% rural) encouraged their wives for taking extra meal during pregnancy. 90% of the deliveries were institutional. 73.7% of respondents needed vehicle for reaching the institution for delivery. In 71% cases among them, husbands arranged vehicle.

**Conclusion:**

Husbands should be more caring and supportive to their wives during pregnancy and delivery including helping in their daily work, availing of antenatal care, adequate treatment of complications, arranging vehicle for institutional delivery etc.

**Can School Health Promotion Activities and Policies be the Answer to the Healthy Future of Children?: A Cross Sectional Descriptive Study of CBSE Schools in India.**

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**Key Words:** School health, child health, health promotion
ABSTRACT
The burden of diseases among Indian children is very high. Around 66% of primary school and 59% secondary school children suffer from at least one chronic disease. The health status varies from urban to rural. The concept of Health Promoting Schools (HPS) augments the health status and prevention of disease among school children.

Aims/Objectives:
To describe current health promotion activities and policies (HPA/P) in CBSE schools of Maharashtra state, India. Considering socio-economic and geographic differences, it is hypothesised that urban schools are more likely to report HPA/P.

Material & Methods:
A cross sectional survey was conducted with school headmasters of all CBSE Schools in Maharashtra State (n =156). Data analysis included descriptive statistics and Chi-square test. The level of significance was set at 5%.

Results & Discussion:
The response rate was 77.56 % (N=121), including 65 (54%) urban and 56(46%) rural area CBSE schools. Health promotion activities like physical environment, health service provision, personal health skills (Alcohol/drug/tobacco education), community relationships and nutrition service were observed with statistically significant implementation difference among urban and rural schools. Action plan of HPS was reported by 57.9% (70) schools which improved health, knowledge and educational outcomes among students. Frequency for health education was 100% (121). Parental participation, physical location & lack of space were the challenges for schools to implement HPA/P.

Conclusion: Although HPA/P present in CBSE schools, the socio-economic and demographic aspects are pivotal causes of practical execution of documented HPA/P among urban and rural schools. Health promoting schools with its evidence based approach to improve health & educational outcomes; it becomes imperative to establish re-assessment of current HPA/P according to regional variations. Similarly National guidelines to address HPA/P in all schools to prevent the occurrence of chronic and infectious diseases are necessary.

Effect of Literacy on Child Rearing Practices Among Married Women in Rural South India.
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Keywords Female Literacy, Child Rearing, Rural India, Facility Based

ABSTRACT
Improper rearing practices among children make them more susceptible to diseases. Despite government effort, there is still a gap in knowledge and practice regarding healthy rearing practices in India.

Aims/Objectives:
This study was conducted to determine the Child Rearing related Knowledge and Practices (CRKP) and their association with female literacy among married women.

Material & Methods:
A cross sectional study was conducted among married women aged 15-45 years with the youngest child in age group 1-5 years attending out patient department of three primary health centre namely Kallanthiri, Chekkanoorni, and Poovandi in the district of Madurai in Tamilnadu in December 2009. The convenient sampling was done and a sample size of 100 was achieved. The data were collected using pretested semistructured questionnaire and CRKP was assessed using a 10 component composite score. The final score was categorised into satisfactory and unsatisfactory based on a cut-off of 80% of the maximum possible score.

Results & Discussion:
Out of 100 participants, 56% of women had satisfactory CRKP. Only 5% of illiterate women had a satisfactory CRKP score as compared to 67% and 90% among women who had 1-5 years of schooling and >5 years of schooling respectively (p<0.05). Among women who had three children, 15 out of 39 (38%) had fully immunized their first child as compared to 25 out of 39 (64%) for the second child and 38 out of 39 (97%) for the third child. The trend was observed irrespective of the education of the mother, but was statistically significant only for illiterate. More illiterate women were following the practice of pre-lacteal feeding than their literate counterpart (ptrend <0.05).

Conclusion:
Improved educational opportunities for females especially in rural India will make them more capable of adopting healthy rearing practice for the child.

Prevalence of Anaemia Among Children in Growing Age in a Resettlement Colony of Delhi
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Keywords: Anemia, Hemoglobin, Growing Age

ABSTRACT
Anemia is the most wide spread nutrition problem in the world and has predominance in developing countries like India,
particularly in children and women. The magnitude of anemia has been well-documented in pregnant women and under
five’s; however, there is no data on the prevailing occurrence of anemia in school children.

**Aims/Objectives:**
The main objective of this study was to estimate the prevalence of anemia, and its correlation to determinants of health
such as age, gender and body mass index in school going children of resettlement colony, Khichripur, New Delhi, India.

**Material & Methods:**
A total of 869 children in the age group of 5-14 years were studied. Written consent was obtained. Haemoglobin
estimation was done in 830 (95.5%) children. Hemoglobin was estimated by Haemocue instrument. A pretested
questionnaire was used to collect the health details of the children. Grading of anemia was done as per the World Health
Organization (WHO) recommended cutoff value for anaemia.

**Results & Discussion:**
Prevalance of Anaemia was 64%. The frequency of the prevalence of anemia was significantly higher amongst girls as
compared to the boys. Results of the study population reveal that 83.9% girls were anemic. It was 44.2% higher than the
boys (38.7%). Most of the anemic children were underweight.

**Conclusion:**
Hence all the school going children should be screened periodically for anaemia and malnutrition so that appropriate
measures can be taken and the growing phase of children is supported.

**Health Status of School Children in Rural Area of Coastal Karnataka**
Dr Priya Rathi, Dr. Eshwari, Dr Sujatha K, Dr. Muralidhar Kulkarni, Mr Ashok, Dr. Veena Kamath Dept of Community
Medicine Kasturba Medical College Manipal Karnataka- 576119

**Keywords** School Health

**ABSTRACT**
School Health Programme is one of the important components of total Health Care Delivery System in the State, which
helps in keeping close watch on the health of school going children. It is an admitted fact that the children are the future
of the Nation. If the children are healthy, the Nation is bound to be strong. School play a very important role in child’s
health and thus future nations health school health is “ health for learning and learning for health” health services, health
education, and a healthy school environment go hand in hand.

**Aims/Objectives:**
1. Accertain the health status of school children 2. to determine nutrition index according to WHO BMI criteria 3. to
impart health education

**Material & Methods:**
Government school in field practice area of department of community medicine were considered for the study. A total of
14 school, were included. Teachers were briefed about School health program. Team of doctors, jr. resident, interns
visited the school and conducted health examination. Team check for anthropometric measurements, common ailments,
and brief systemic examinations. All data are collected, analyzed. Nutritional status assessed by using who excel sheet.

**Statistics:** A descriptive statistics is presented by mean, standard deviation, and percentage

**Study design:** cross sectional study
**Study period:** July-August 2012

**Results & Discussion:**
Result will be announced on conference as study is still on its process.

**Conclusion:** Study is still in process

**Anthropometric Assessment of Health of Children Aged 6-14yrs in Rural Areas of Udupi District, Karnataka.**
Dr. Eshwari, Dr. Priya Rathi, Dr. Sujatha K, Dr. Muralidhar Kulkarni, Mr Ashok, Dr. Veena Kamath Department of
Community Medicine, Kmc. Manipal Karnataka

**Keywords** Body Mass Index

**ABSTRACT**
Malnutrition is still a major public health problem over large areas of the world, especially developing countries and
particularly amongst low socio-economic groups. Half of the children born in low-income societies die before they are
five years of age. A significant proportion of these deaths are attributed directly or indirectly to malnutrition. Weight is a
sensitive index for the evaluation of nutritional status of school children, particularly where their precise ages are known.
Thus weight alone cannot be the most suitable index in the evaluation of the nutritional status of school children.

**Aims/Objectives:**
To determine the relative merits of anthropometric measurements commonly used in nutrition survey for the evaluation
of the nutritional status of school children. OBJECTIVES: 1) To establish a relationship between nutritional status and
the following anthropometric parameters- weight, height, weight-height ratio, height for age, weight for age.

Material & Methods:
A school health survey is being conducted by the department of community medicine, Kasturba medical college, Manipal in 14 schools of Udupi dist which come under the rural field practice area of the department. Our team consists of consultants, junior residents, interns, medico social workers. Detailed assessment of the health status will be done which consists of anthropometric measurements like height, weight, BMI, general examination & systemic examination will be done. Data will be compiled and comparison of different anthropometric indices namely weight, height, weight-height ratio, height for age, weight for age will be done. Health education pertaining to nutrition is given to children and teachers.

Results & Discussion: The study is under process and results will be announced at the time of presentation.

Conclusion: Study is Still in Process

Effect of Fluoride Exposure on the Intelligence of Rural School Children in Madhya Pradesh, India
Dr. Sonia Tiwari, Dr. Sudhanshu SaxenaLecturer, Department Of Oral Pathology And Microbiology, People's Dental Academy, Bhopal, Madhya Pradesh, India, Pin-462037
Keywords Child, Fluoride Poisoning, Intelligence, Water

ABSTRACT
Elevated concentration of naturally occurring fluoride in drinking water is a worldwide problem. Many Asian countries including India have reported a concentration of fluoride exceeding the World Health Organization (WHO) guidelines values or their prevailing national standards. Dental and skeletal effects associated with fluoride, in humans, are well documented. Also, the existing literature reports the neurological consequences associated with exposure to fluoride.

Aims/Objectives:
To assess the relationship between exposure to different drinking water fluoride levels and rural children’s intelligence in Madhya Pradesh state, India.

Material & Methods:
This cross-sectional study was conducted among 12-year-old rural school children of Madhya Pradesh state, India. The children were selected from low (< 1.5 parts per million) and high (1.5 parts per million) fluoride areas. A questionnaire was used to collect information on the children’s personal characteristics, residential history, medical history, educational level of the head of the family, and socio economic status of the family. Levels of lead, arsenic, and iodine in the urine and the levels of fluoride in the water and urine were analyzed. The children’s intelligence was measured using Raven’s Standard Progressive Matrices. Data analysis was done using the chi-square, one way analysis of variance (ANOVA), simple linear regression, and multiple linear regression tests. P value < 0.05 was considered statistically significant.

Results & Discussion:
Differences in participant’s socio demographic characteristics, urinary iodine, urinary lead, and urinary arsenic levels were statistically not significant (P>0.05). However, a statistically significant difference was observed in the urinary fluoride levels (P 0.000). Reduction in intelligence was observed with an increased water fluoride level (P 0.000). The urinary fluoride level was a significant predictor for intelligence (P 0.000).

Conclusion:
Children in endemic areas of fluorosis are at risk for impaired development of intelligence.

A Study to Evaluate the Effect of Nutritional Intervention Measures on Admitted Children in Selected Nutrition Rehabilitation Centers of Ujjain District.
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ABSTRACT
The state of Madhya Pradesh has the largest number of malnourished children in India; 6 million children under five are malnourished including 1 million moderately malnourished and 1.3 million severely malnourished. Severely malnourished children have high mortality. To prevent deaths among these children, Government has started the Nutrition Rehabilitation Centers (NRCs) under the Bal Shakti Yojna with support from UNICEF with the objective to bring down the percent of severely malnourished children less than 1%.

Aim:
Evaluate the effect of nutritional interventional measures provided at NRCs in improving the nutritional status of admitted children.

Materials and Methods:
There are eight NRCs in Ujjain district. out of which 1 in urban area and 7 are in rural area.

Study Period: January 2012 to June 2012.
**Study Place:** NRCs centre at Madhavnagar Govt. Hospital, Ghatiya CHC & Tarana CHC.

**Study Type:** Longitudinal study.

**Study subject:** Children between 6-60 months with severe malnutrition admitted to selected NRCs during study period.

**Method:**

All children who were newly enrolled in selected NRC were recruited within 2 days of NRC enrolment. A detailed history and physical examination were recorded. Anthropometric indices such as weight, height, mid arm circumference were recorded from the NRC register at the time of admission and discharge and during follow up period. Family demographic and socioeconomic information was obtained at enrolment.

**Result:**

A statistically significant difference was observed between the mean weight at discharge and the mean weight at admission for the study group ($P<0.001$) and for boys ($P<0.001$) and girls ($P<0.001$) separately.

**Conclusion:**

Study results show that the NRCs have had a positive impact on the selected anthropometric indicators of severely malnourished children and should be implemented for management of severely malnourished children as soon as possible, keeping in mind the present condition of children in MP.

**Socioeconomic Differentials of Child Health Status in Rural India**

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**Keywords** Nutritional Status, Maternal Education, NFHS

**ABSTRACT**

Despite recent achievement in economic progress in India, the fruit of development has failed to secure a better nutritional status among all children of the country. Growing evidence suggest there exists a socio economic gradient of childhood malnutrition in India. The present paper is an attempt to measure the gap of socioeconomic differentials in chronic childhood malnutrition in rural India and to realize the role of socioeconomic status as the determinant of nutritional status of children. In India alone there are approximately 60 million children who are underweight and the prevalence is higher in rural areas compared to urban areas.

**Aims/Objectives:**

The objective of this paper is to measure the differentials of nutritional status of children in rural India.

**Material & Methods:**

The data from the National Family Health Survey-3 (NFHS-3) is the third round in the NFHS series of surveys. The survey was carried out in 29 states of India during 2005-2006. The structure of the survey was similar to that of the Demographic and Health Survey (DHS) conducted in various Asian and African countries. NFHS survey is a large-scale, multi-round survey conducted in a representative sample of households throughout India. Bivariate, rich–poor ratio and multivariate technique have been used to understand the differentials of the child health.

**Results & Discussion:**

The prevalence of stunting was 34.6 percent, wasting 13.9 percent and underweight 38.4 percent. Age (in month) of the child, Mothers’ educational level, socioeconomic status and family size were significantly associated with the nutritional status of the child.

**Conclusion:** This study reveals that maternal educational status, socioeconomic status and family size are most important determinants of the nutritional status of the child. Efforts directed towards improvement of female literacy, socioeconomic status and restricting family size will have a positive impact of the nutritional status of children.

**Association and Comparison of Nutritional Statusand Morbidity Pattern in Under Five Children Reporting in out Patient Department in Rural Health Training Centre at Sakwar, Thane**

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**Keywords:** Nutritional Status, Morbidity, Children

**ABSTRACT**

People living in rural and tribal areas are highly vulnerable to disease and other health-related conditions like malnutrition and morbidity. Various studies have demonstrated that children living in tribal areas suffer from a higher rate of morbidity like ARI, skin infection, and acute diarrhoeal diseases. The vicious cycle of malnutrition infection malnutrition can be broken by preventive intervention.

**Aims/Objectives:**

To study association and comparison of nutritional status and morbidity pattern amongst under five children reporting in rural health training centre sakwar, Thane. • To study the proportion of malnutrition in children reporting in OPD amongst under five children. • To study the proportion of various morbidities in relation to the nutritional status. • To
suggest recommendations for strengthening nutritional programme with focus on reduction in morbidity amongst under five children.

Material & Methods:
- Study Design – Cross sectional study.
- Study Setting – Rural health training centre, Sakwar
- Study Period – March 2012 to May 2012.
- Study Subjects – Universal sampling method was used. 220 children aged 0 to 5 years reporting in OPD.
- Study Tools – Clinical & nutritional assessment proforma was devised and screening of all under five children was done. The data was analysed using SPSS package.

Results & Discussion:
- Out of the 220 subjects examined, 106 (48%) are male and 114 (52%) are female children.
- 89 (40%) are severely malnourished, 64 (29%) had mild malnourishment & 67 (31%) are normal.
- ARI infections was more common in severely malnourished children which is about 39 (44%). 21 (24%) had skin related infection.
- Other morbidities like fever (12%), diarrhoeal diseases (4%) are also found in this study.

Conclusion:
The majority of children are undernourished suffering with common illness like ARI, skin infection, fever diarrhoeal diseases. The vicious cycle of malnutrition infection malnutrition can be broken if focussed structural evidenced based programme is devised at local level as sub project of RCH.

An Analytical Study of Distribution of Extent, Weight and Gender of Preterm Births in Hisar
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Keywords: preterm birth, extent, weight, gender.

ABSTRACT
Of the numerous health problems, preterm birth has been identified as the most crucial problem of public health. Irrespective of developing and developed contemporary world, it is the main cause of neonatal death globally.

Aims/Objectives:
To study the extent, weight and gender of preterm births in Hisar.

Material & Methods:
The secondary data was gathered by the researcher from the Civil hospital of Hisar city, Haryana, which is a northern state of the country and a total of 1072 respondents were taken as a sample. The data is recorded in terms of live birth, preterm birth, gender and weight were analysed for a period of 4 months i.e. from November- January (2011-12).

Results & Discussion:
As per the data, extent of preterm birth is 12.2 percent and the number of preterm babies whose weight lie in range of 2-2.4 Kg were found to be maximum followed by number of preterm infants whose weight is less than 2Kg. It was interesting to note that genderwise higher percent was observed for preterm in male children than female as per the data.

Conclusion:
There is an urgent need to solve the major public health problem of preterm birth. This problem brings a great physical, psychological and financial loss to the family as well as to the country. Further study should be required to study the relation between gender and preterm birth.

Nutritional Status of Urban Slum Under-Fives at UHTC, BRIMS, Bidar (KA).
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Key Words: Under-Fives, Malnutrition

ABSTRACT
Protein-energy malnutrition has been identified as a major health and nutrition problem in India. Mainly it occurs in weaklings and children in the first years of life. Malnutrition is an underlying cause in 30 percent of deaths among children under age five.

Aims/objectives:
To study nutritional status of urban slum under-fives visiting Urban Health Training centre, BRIMS, Bidar.

Material & methods:
The study was carried out at Urban Health Training centre, BRIMS, Bidar during Jan to Mar 2012. All the under fives coming to Urban Health Training centre were enrolled. Data was collected with pre-designed and pre-tested questionnaire. Nutritional status was assessed with the help of Gomez classification (Weight for age). Microsoft office Excel was used to analyse the data.

Results & discussion:
Total two hundred and Fifty under fives were enrolled during study period. 148 (59.2%) were males and 102 (40.8%) were females. 55(23.2%) were below the age of one year. 203 (81.2%) were from low socio-economic status (class IV&
V). It was found that 114 (57.6%) mothers of under fives were not having any school education. Regarding nutritional status 198 (79.2%) was found malnourished. Among them 164 (65.6%) were having mild, 26 (10.4%) were moderate and 8 (3.2%) were having severe malnutrition.

**Conclusion:**
The factors maternal education and the socio-economic status of the family are having important role in development of nutritional status of the under fives.

**A Study to Assess Effectiveness of Structured Teaching Programme on Knowledge of Domiciliary Management and Prevention of Upper Respiratory Tract Infections Among Mothers of Under Five Children in Selected Urban Slum at Bangalore**

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**ABSTRACT**
In India mortality of under-five children due to acute respiratory infections is 23%. A child in urban area suffers from 5-9 episodes of respiratory infections annually during the first five years of life, each episode lasting for a mean duration of 7-9 days. Upper respiratory tract infections are usually minor illnesses. Many children with cough, cold and fever do not have pneumonia and they don’t required treatment with antibiotics. Main causative factors of upper respiratory infections are viruses where antibiotics are not useful, they increase resistant strains and cause side effects while proving no clinical benefit, and are wasteful expenditure. Symptomatic treatment and domiciliary management is much more effective in such cases. Teaching mothers with planned instructional material help in improving knowledge and practice of mothers with regard to the care of their children at home.

**Objective:**
1. To assess the level of knowledge on domiciliary management and prevention of upper respiratory tract infections among mothers of under-five children. 2. To assess the effectiveness of structured teaching programme on domiciliary management and prevention of upper respiratory tract infections. 3. To determine the association between pretest posttest knowledge scores and the selected demographic variables among the mothers of under five children.

**Methodology:**
1. Research design and approach: Quasi experimental design with an evaluative approach was used. 2. Setting of the study: Mahalakshmi layout slum area, Bangalore. 3. Sample: sample consisted of 60 mothers of under five children; 30 mothers in experimental group and 30 in control group. 4. Sampling technique: Purposive sampling technique which is of nonprobability sampling approach 5. Tool: A structured interview schedule consisting of 40 items on knowledge of domiciliary management and prevention of upper respiratory infection

**Results:**
Findings related to demographic variable: • Majority of the mothers 17 (56.7%) from control group and 21 (70%) from experimental group were in the age group of 21-30 years. • Majority of mothers 12 (40%) and 10 (33.3%) found illiterate from control and experimental group respectively. • The majority of mothers 22 (73.3%) were house wives among control and experimental group.

**Findings related to knowledge aspect:**
Overall pretest and posttest mean knowledge scores of Experimental group was 48.8 and 79.7 respectively. The obtained ‘t’ value is 40.30* which is statistically significant at 5% level. Posttest means knowledge scores of Control and Experimental Group was 49.1% and 79.7%. The obtained ‘t’ value is 16.78* is statistically significant at 5% level. There is significant difference in the pretest and posttest knowledge score among experimental group. There is significant difference in the posttest knowledge score among experimental and control group. This indicates structure teaching programme was effective.

**Conclusion:**
Findings of the study show that there was significant increase in knowledge score of mothers in experimental group after administration STP. From this it can be concluded that structure teaching programme was effective mean in improving knowledge of the mothers regarding domiciliary management and prevention of upper respiratory infections in children.

**Prevalence & Determinants of Malnutrition Among Under Five Children in Urban Slums of Rajkot City, Gujarat.**

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**Keywords:** Malnutrition, Under five age, factor influencing

**ABSTRACT**
In India more than 42.8% children of under five age group are under weight, 19.8% wasted & 48% stunted. Due to urbanization and migration, number of slums are increasing in cities, where nutritional status of children is poorer than rural areas. Present study is aim to study factors affecting nutritional status of children & their association.
Aims/Objectives:
To study prevalence of malnutrition among children in urban slums of Rajkot city. To study association of various socio-demographic and maternal factors with malnutrition.

Material & Methods:
A cross-sectional observational study carried out in Rajkot city. The study area is divided into three zones and which is further divided into 23 wards. 10 wards were selected by proportionate sampling, and from each ward 4 anganwadi were selected by simple random sampling and from each anganwadi area registered 12 children were selected by systemic random sampling to complete sample size of 480 children. Proportionate prevalence and chi-square were used for analysis.

Results & Discussion:
From 480 children, 56.5% were underweight, 54% stunted and 20% wasted. Stunting, wasting and underweight were more common in female than male with statistically significant difference. Socio demographic conditions like joint family, lower income groups, backward class, poor sanitation were significantly associated with under nutrition. Maternal factors like literacy, occupation, birth spacing, supplementary food during lactation period, counseling for nutrition of child were also showing association with under nutrition in children. Factors of children like birth order, low birth weight, illness, initiation of complimentary food, utilization of anganwadi services were also showing significant association.

Conclusion:
Study shows high prevalence of malnutrition in slum children which is significantly associated with maternal and socio demographic factors.

Growth Pattern of Sub-Cutaneous Fat in Children with Transfusion Dependent ß-thalassemia
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Keywords: Skinfold thicknesses, ß-thalassemia, growth, Indian

ABSTRACT
In view of the complete absence of longitudinal data on growth of subcutaneous fat of ß-thalassemia patients of Indian origin in this presentation, an attempt has been made to study auxological dynamics of the fat fold thicknesses of transfusion dependent ß-thalassemia children.

Objective:
To study pattern of growth of subcutaneous fat (Skinfold Thicknesses) of transfusion dependent ß-thalassemia patients.

Material and Methods:
192 boys and 60 girls between 1 to 10 years of age, representing mixed socioeconomic strata and diagnosed as cases of ß-thalassemia enrolled from ‘Thalassemia Blood Transfusion Unit’ of the department of pediatrics comprised sample for this study. Every patient was measured for triceps, biceps, sub-scapular, mid-axillary skinfold thicknesses at half yearly age intervals in Growth Laboratory of the department using standardized techniques and instruments, following a mixed-longitudinal growth research design. The average pre-transfusion haemoglobin level of the patients was 9.6g% in boys and 9.7 g% in girls.

Results and Discussion:
The pattern of growth for all the skinfold thicknesses in general, exhibited fluctuating trend. The maximum deposition of sub-cutaneous fat was noticed at the level of triceps and minimum at midaxillary while, sub-scapular and biceps skinfold thicknesses enjoyed intermediary position. Thalassemia girls generally, measured fatter than the boys in respect of all skinfold thicknesses throughout the age range considered. The skinfold thicknesses measured amongst thalassemia boys and girls measured thinner than their normal Indian and Western counterparts.

Conclusion: As compared to normal children, lower values recorded for different skinfold thicknesses measured amongst thalassemia patients speaks of adverse influence of the disease process on the growth of subcutaneous fat in ß-thalassemia children.

Adolescent Health Problems in Rural Goa
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Keywords: Adolescent Girls, Hemoglobin, Anaemia

ABSTRACT
Adolescent girls constitute a vulnerable group particularly in developing countries where they are exposed to high morbidity and mortality. Adolescence represents a real opportunity to make differences in life long pattern.
Aims/Objectives:
Pilot study to evaluate the incidence, presentation management and treatment options for anaemia in rural adolescent girls in Goa, India

Material & Methods:
School health camps were conducted at high school of Khadki and Mangueshi, rural areas of Goa in Nov’11 and Jan’12 respectively. It was organized by Shri. Brahmachaitanya trust, in collaboration with Goa Medical College, and Directorate of health services Goa. Total 250 adolescent girls from standard VIII, IX. X participated. Thorough clinical history and clinical examination was done. Haemoglobin estimation was done by hemocue method. Adolescent health education was given on audio visual aid by obstetrician and Gynecologist. Iron supplementation was given along with albendazol singledose.

Results & Discussion:
Anemia was detected in 45.2% of girls. 29.2% were mild, 14.4% moderate. 1.6% had severe anemia. Menorrhagia was seen in 6.4%, 10.8% had dysmenorrhea. White discharge was complaint in 18%, out of whom, six percent had itching associated. Stomatitis was noted in 7.2%. Dental caries found in 6.8%. Subnormal BMI was seen in 56%. History suggestive of worm infestation was given by 14% and other infection like URI, UTI etc was seen in 7% of girls.

Conclusion: Prevalence of nutritional anemia in adolescent girls is significantly high in rural areas of Goa though education and percapita income is high. Faulty and deficient diet menorrhagia, worm infestation contribute to misery. Education and supplementation should be major intervention.

Comparative Study of KAP on Menstruation and Menstrual Hygiene in Rural and Urban Area of Nagpur District
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Keywords - Socio-Cultural Practices, Menstrual Hygiene

ABSTRACT
Menstruation is an important milestone in the life of an adolescent girl. Awareness regarding the menstruation as well as menstrual hygiene is very important for the better reproductive life. Urban and rural differences do exists regarding awareness of menstruation, socio-cultural practices and menstrual hygiene.

Aims/Objectives:
1) To study and compare socio-cultural practices during menstruation.
2) To study and compare KAP on menstruation and menstrual hygiene in rural an urban area.

Material & Methods:
It was a community based cross-sectional study on 310 adolescent girls between the age of 10-19 years by house to house survey. Every alternate girl was selected by systemic random sampling.

Results & Discussion:
No ceremony was performed at the time of menarche in either area. Socialrestrictions during menstruation included restriction to go to school, restriction to play outside, enter the kitchen, attend social functions, visit the place of worship, to do household chores and job and food restriction. The difference insocio-cultural practices was not statistically significant except for food restrictions which were more in rural area (4.75% in urban and 12.85% in rural area). 21.35% of the girls in urban and 16.32% of girls in rural area were fully aware of menstruation while 36.62% girls in urban and 52.43% girls in rural area were aware of the menstruation. The difference in the awareness in rural and urban area was statistically significant. Main source of information in both areas was mother. Use of commercially available sanitary pads was found in 62.03% the urban area as compared to 43.40% in rural area

Conclusion: Awareness and Sanitary practices in rural area were unsatisfactory as compared to urban area.

A Cross-Sectional Study of Common Health Problems of School Going Children in District Muzaffarnagar, U.P
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Key words: Anemia, malnutrition, worm infestation, tobacco, BMI.

ABSTRACT
Research indicates that nutritional deficiencies and poor health in school going children are among the important causes of low school enrolment, high absenteeism, early dropouts and poor classroom and exam performance.

Objective:
To find out the common health problems of school going children.

Methods:
The present study was conducted on 1192 children, aged 5-16 years enrolled under School Health Scheme with the
A Study of the Symptoms of Gastro Oesophageal Reflux Disease and Associated Risk Factors Among the Rural School Children of Veleru India

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Keywords: Gastro Oesophageal Reflux Disease, School children, Dietary habits, Sleep disturbances

ABSTRACT
Prevalence of Gastro Oesophageal Reflux Disease (GERD) in all ages has shown an upward trend over the past decades. The reasons for this increase are ill understood. The data in the pediatric population is limited and more work is warranted to know the extent of problem and its natural history. Recent studies have linked childhood GERD to adult GERD. There is almost no literature available about childhood GERD in this part of the country and so this study was conducted to assess the symptoms, risk factors of GERD among the school children residing in a rural area.

Aims/Objectives:
To find out the prevalence of GERD risk factors among the school children aged 8-17 years and To find any association between BMI, meal pattern and sleep disturbances related to GERD

Material & Methods:
We did a cross sectional interview study on 380 school children of 6-10th std from 4 schools of Veleru the Rural Health Center attached to Dr.Pinnamaneni Siddartha Institute of Medical Sciences. The Questionnaire consisted of questions for reflux symptoms, meal pattern and sleep disturbances.

Results & Discussion:
The symptoms of reflux like abdominal pain was reported in 7%, heart burn in 1.3%, regurgitation in 2.4%, vomiting in 2.9%, difficulty in swallowing in 2.1%, sore taste in mouth in 0.8% of the children. The risk factors for reflux like caffeinated drinks were found in 45.3%, very spicy food in 12.1%, heavy meal sin 2.4% of the children. The sleep disturbances were seen in 33.4% of the children who woke up at night and 6.4% of the children who did not feel fresh in the morning. Obesity was present in 0.6% of the children

Conclusion:
School children should be informed about the symptoms and risk factors of GERD so that healthy dietary habits can be developed at a young age and GERD can be prevented

A Study to Assess the Prevalence of Health Problems Among School Age Children in a Rural School

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Keywords: Prevalence, health problems, school children, rural

ABSTRACT
Yet most baffling problems remain, despite the evidence based health programs for school age children in rural India. Spectrum of morbidity and mortality among school children in India have comparable reports over decades but school age children (5 – 15 years) are yet to receive as much attention from health providers / planners as under-fives. MICS 2000 and IDHS 2006 have brought back 83 % of primary school going children in India on the global agenda. However, not much data is available on the prevalence of confounding health problems in its demographic system that needs more probing.

Aims / Objectives
Study aims to identify the common health problems and compare them with selected demographic profile of school age
Materials and Methods
This cross sectional descriptive survey adopted the guidelines of Indian paediatrics, WHO and HBSC, Canada surveys on school children morbidity. Total of 60 school age children from a rural school of Phursungi village, Pune were selected randomly and underwent a screening examination, after interview on demographic details in a health camp.

Results and Discussion
Pallor (71.6 %), Pediculosis (51.6 %), Dental caries (23.3 %), Unhygienic teeth/oral cavity (36.6 %), Dandruff (11.6 %), dirty nails (70 %), Ear wax (38.3 %), poor BMI (mean 18), weight/height index (mean 2, SD 0.2) and mean Hb was 10 gm/dL (SD1.2 gm) were some of the health problems identified. A significant correlation (p < 0.05) was observed between socio economic status with anthropometry and dental condition, hair and nails condition, (÷2 of 13.97). The prevalence of malnutrition was high among children of labourers (p= 0.15), having 3 siblings (41.6 %) and 2 meals/day (81.6 %).

Conclusion
Identification of health problems in school age through screening will be a wealth of healthy program for children and community.

Data sources:
• India Multiple Indicator Cluster Survey (MICS) 2000
• Demographic and Health Survey (DHS) India 2005 - 06
• Health Behaviour in School-Aged Children (HBSC), Canada

A Descriptive Study to Identify the Prevalence of Anemia Amongst Adolescent Girls of A Rural School in the Age Group and Plan Interventions as Per the Felt Needs.
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Keywords:
Anemia, prevalence, general health

ABSTRACT
Health of the adolescents is of utmost importance as they are the productive age group and need more attention for their health and well being especially the girls as they are the torchbearers for giving the nation a healthy population.

Aims/Objectives:
Aim: To identify the prevalence of anemia amongst adolescent girls in the rural population and plan intervention as per the felt needs.

Objective:
1. To conduct the general physical assessment of the adolescent girls.
2. To assess the level of haemoglobin among the adolescent girls. 3. To render intervention for those identified with low level of haemoglobin.

Material & Methods:
Sample: 100 adolescent girls, age group of 13-18 years, Convenient sampling. Method: Conduct of Health camp at school premises Tool: Anthropometric measurements, physical examination, Haemoglobin analysis.

Results & Discussion: BMI – most of them (52%) were undernourished, 12% suffered with pediculosis & most of the adolescent girls (47%) were anemic.

Conclusion:
The study revealed the importance of giving emphasis on adolescent nutrition & personal health established. True iron deficiency anaemia, as evidenced by decreased serum ferritin level (<15 ng/ml) was 6.25% in anemic boys as compared to 56.5% inanemic girls.
Study subjects / parents were interviewed using semi-structured interview schedule regarding all relevant variables. Assessment of dietary iron intake was done using 24 hours diet recall, hemoglobin estimations was done by portable hemocue. Peripheral smears of anaemic subjects were prepared and serum ferritin estimation was done by ELISA.

Results and discussion:
43% of the subjects were found to be anemic (52% girls, 34% girls)/ Mean dietary iron intake of subjects was 25.13±9.14mg (23.53±8.95mg in girls and 26.74±9.14mg in boys). Consumption of ≤3 serving of green leafy vegetables; consumption of tea/coffee; and inadequate dietary iron intake manifested higher risk of anemia OR (0.133) (CI at 95%; 0.052-0.341); OR 0.3) (CI at 95%;0.108-0.832); and OR (2.389) (CI at 95%; 1.056-5.407), respectively. Statistical correlation between anemic and vegetarian diet could not be established. True iron deficiency anaemia, as evidenced by decreased serum ferritin level (<15 ng/ml) was 6.25% in anemic boys as compared to 56.5% in anemic girls.

Conclusion:
Iron deficiency anemia is higher in adolescent having inadequate dietary iron intake. Supplementing iron in diets will considerably prevent anemia. However, not all anemia is attributable to iron deficiency.

Effectiveness of Health Education Programme on Awareness on Menstrual Hygiene Among Adolescent Girls Loni, B.K.Village.
Mrs. Kale Kalpana S, PIMS (DU), College of Nursing, Loni (Bk), Tal. Rahata, Ahmednagar Dist, Maharastra, Pin: 413736.

Key terms: Assess, effectiveness, health education program me, menstrualhygiene, adolescent girl.

ABSTRACT
Menstrual hygiene and management will directly contribute to (MDG)-2 on universal education, MDG-3 on gender equality and women empowerment. Akey priority for women and girls is to have the necessary knowledge, facilities and the cultural environment to manage menstruation hygienically and with dignity.

Objectives:
The study was conducted (1) to assess the awareness on menstrual hygiene among adolescent girls before health education programme.(2) To determinethe effectiveness of health education programme on menstrual hygiene, (3) and to compare the awareness level with their selected demographic variables.

Material and Methods:
It’s a Quasi experimental study pretest and posttest without control group approach was used to assess the effectiveness of health education programme on awareness of menstrual hygiene among adolescent’s girls of Loni (Bk)village of Ahmednagar Dist, Maharrastra.Participants: a total of 76 adolescent girls who were studying in Padmashree Vikhe Patil Junior College. The samples were selected through simple random sampling method (Lottery) method. Tool: self-prepared and pre tested structured questionnaire used togather information on physical characteristic of menstruation, menstruationand its abnormalities, knowledge of menstrual hygiene, diet duringmenstruation, belief and behavior Statistical analysis: descriptive statistics (mean. SD, mean percent) and inferential statistics (chi square test, t- test) were applied wherever required.

Results: Study findings shows that overall awareness level on menstrual hygiene inpretest shows that the mean score was (5.2±0-87) which is 57.7% indicates adolescents had average knowledge whereas in posttest the mean score was (16.2±1.2) which is 85% indicates very good knowledge with effectiveness of 27%. Results shows that the health education programme effective inimproving the awareness on menstrual hygiene, ('t' -5.57). There was significant association found between awareness level and socio demographiclike age (6.3) at P< 0.05 level.

Conclusion:
Menstrual hygiene, a very important risk factor for reproductive tractinfections, is a vital aspect of health education for adolescent girls. Educational television programmes, trained school nurses/health personnel, motivated school teachers and knowledgeable parents can play a very important role intransmitting the vital message of correct menstrual hygiene to the adolescentgirl of today.

Evaluate the Eating Behaviors Among Adolescent Girls of Rural Area.
Mrs. G. Vimala, Lecturer, PIMS (DU), College of Nursing, Loni (Bk), Tal. Rahata, Ahmednagar, Dist, Maharastra.

Keywords: evaluate, eating behaviors and adolescent girls.

ABSTRACT
Today’s adolescents are tomorrow’s adults. The nutritional needs during adolescence are increased because of the increased growth rate and changes inbody composition associated with puberty. The eating behaviour of young people has come increasingly under the spot light in recent years amid claims that many adolescents have poor dietary habits.

Objectives:
The present study focused on the following Objectives, (1) to evaluate theeating behaviors among the adolescents population and (2) to find associationof eating behaviors with their socio demographic characteristics.
Material and methods:
The descriptive study was conducted to evaluate the eating behaviors of adolescent girls of rural area of Loni (Bk) village. Total of 70 adolescent girls studying in college of nursing were selected. Stratified random sampling (proportionate) technique was used to gather the information. A survey method was used with structured rating questionnaire to obtain the information. The descriptive statistics (mean, SD, mean percent) and inferential statistics (chi-square test) were applied wherever required.

Results:
The result reveals that the adolescents had satisfactory eating behaviors with the mean score of 18.8±2.3. In relation to various aspects of eating behaviors, the highest mean score (18.8±2.3) which is 62.8% was obtained for ‘satisfaction with diet’ which is satisfactory eating habits and the lowest mean score and mean percent which is 47.4% was obtained for ‘eating habits’ and ‘meal time habits’ indicates adolescents had unhealthy eating habits. It was also found that there was a significant association with eating behavior and the sociodemographic variable like family monthly income (at p<0.05 level).

Conclusion: The welfare of the entire community depends on the health and welfare of youth. It is essential to raise awareness on significance of diet and healthy eating behaviors; and develop health seeking behaviors among the rural adolescents to improve health status and quality of life.

Prevalence of Anaemia in Rural Adolescent Girls of A Southern District of Rajasthan
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Keywords Anaemia, Sahli’s Hemoglobinometer
ABSTRACT
Anemia in adolescent girls is a significant public health problem. It affects their quality of life, physical activity and academic performance. In India anaemia is prevalent in women belonging to reproductive age group (15-49) and low socioeconomic strata. As per DLHS (2002-04) prevalence of anaemia inadolescent girls is very high (72.6%). With this background this study was undertaken in a rural area of Udaipur.

Aims/Objectives:
(1) To study the prevalence of anemia in rural adolescent girls. (2) To study sociodemographic factors of anaemia.

Material & Methods:
This study was school based cross-sectional study conducted at 2 rural schools of Vallabhnagar selected by simple random sampling during month of July 2012. 150 adolescents girls (10-19 yrs) were included in the study. Prior consent was taken from parents and school authority. Socio-demographic information was obtained by Interview technique. Hemoglobin of study subjects was measured by Sahli’s Hemoglobinometer.

Results & Discussion:
Prevalence of anemia was found to be 48.0%. Majority of girls with anemiabelonged to 10-13 years age (P<0.05). There existed no significant association between attainment of menarche and occupation of parents of study subjects. Further findings will be presented in power point.

Conclusion:
Anaemia is a prevalent health problem among adolescent girls. Nutritional dietary deficiency and worm infestation are the main factors cited for that. On going nutritional programs for adolescents should be properly implemented, strengthened and monitored.

Comparative Study of Menstruation in Rural and Urban Area of Nagpur District.
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Keywords: Menstrual Parameters, Menstrual Disorders, Host Factors
ABSTRACT
Adolescence is period of turbulent growth and development when the physical and psychological changes occur and menstruation is an important indicator of adolescence. Though natural phenomenon, various menstrual parameters are affected by various factors including urban and rural differences

Aims/Objectives:
1. To study and compare some of the menstrual parameters in urban and rural adolescent girls.
2. To study and compare menstrual disorders during menstruation.
3. To study and compare effect of some host factors on menstrual parameters.

Material & Methods:
Community based Cross-sectional study on 310 girls aged 10-19 years each from urban and rural areas of Nagpur district interviewed by house to house survey. Every alternate house selected by systemic random sampling. Menstrual parameters viz.age at menarche, menstrual cycle length, duration off low and host factors like age, nutritional status,
physical activity and anemiam were studied

Results & Discussion:
In urban area mean age at menarche was 13.26 years, menstrual cycle length was 34.08 days and duration of flow was 4.38 days. While in rural area parameters were 13.41 years, 32.47 days and 4.40 days respectively. Prevalence of menstrual disorders was similar in both rural and urban areas. When host factors were considered, age was significantly associated with menstrual cycle length (>35 days) and presence of dysmenorrhoea. Body mass index was significantly associated with dysmenorrhoea. Physical activity was significantly associated with the variation in menstrual cycle length and dysmenorrhoea and anemia was significantly associated with menstrual cycle length, dysmenorrhoea and premenstrual syndrome.

Conclusion:
There was no Urban and rural difference observed in age at menarche, duration of blood flow, but more urban girls were having cycle length of more than 35 days. Host factors do have impact on the menstrual parameters.

Interventional Study to Assess Nutrition Related Knowledge Amongst Adolescents: an Urban Rural Comparison
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Department Of Community Medicine, Bharati Vidyapeeth (DU) Medical College, Pune, Maharashtra, India.

Keywords: Adolescents, Nutrition Related Knowledge

ABSTRACT
Adolescence is a nutritionally critical period of life due to dramatic increase in physical growth and development. Dietary habits among this influence-able group have far reaching impact on their health in adulthood.

Aims/Objectives:
To determine nutritional status and to assess impact of intervention on nutrition related knowledge amongst adolescents in urban and rural schools.

Material & Methods:
Methods: An interventional study was conducted at randomly selected school in Pune city and Bhor taluka. After obtaining necessary permission, pretest data was collected using self administered proforma from 8th and 9th standard students. An interactive session on nutrition followed by personal counseling was held. Post test was conducted. For assessing nutritional status height and weight were recorded. Study Duration: 15 days Study population: All students of class 8th and 9th who were present for pretest and post test. Sample size: 497

Results & Discussion:
264 students from urban and 233 from rural school were included in the study. 48.48% from urban school and 72.4% from rural were underweight. Almost 59% and 42% students were aware of dietary sources of iron, vitamins A, B12 and calcium in urban and rural schools respectively. This increased to 75% and 57% respectively in post test. 45% in urban and 69% in rural school did not know signs and symptoms of deficiency of iron, vitamins A, B12 and calcium. Post test almost 78% in urban and 50% in rural schools knew sources. 58.71% and 48.49% eat chips and 67.42% and 68.67% have carbonated drinks 1-2 times a week in urban and rural schools respectively.

Conclusion: Students of rural school showed poor nutritional status and nutrition related knowledge as compared to urban school though significant increase in knowledge was seen in both after intervention.

A Study of the Teenage Preganancies in Rural Area.
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Keywords: Early Marriage, Abortion

ABSTRACT
Teenage pregnancy (15-19 years) is on the rise, emerging as a serious problem today all over the world and more so in the developing countries like India, as early marriages and early pregnancy are the accepted cultural norms of our society. In India, 18.2% of women aged between 20 and 24 years were married by the age of 15 years and 47.4% by the age of 18 years. 16% of adolescents between 15 and 19 years have begun childbearing. Adolescent childbearing has many consequences. Besides, being a major determinant of large family size and rapid growth in population, fertility among adolescents may have significant social, economic, and health consequences. Many studies have shown that a majority of teenage pregnant mothers were at high risk during pregnancy and had complications during delivery. A lack of awareness about legal age of marriage is a common phenomenon in rural areas. Publicity of Child Marriage Restrain Act is poor and enforcement virtually nonexistent. And so, millions of girls in the country are married before attaining the age of 18 years. In view of the negative socio-economic, demographic, and health consequences of early childbearing, it is important to have a clear understanding of this vulnerable group of teenage pregnant girls.

Aims/Objectives:
(1) To assess the prevalence of teenage pregnancies in rural area.
(2) To describe the socio-demographic characteristics of the teenage pregnant mothers.
(3) To assess the fetal and maternal outcome of teenage pregnancies.

Material & Methods:
Study type and design: Descriptive study with longitudinal design.
Settings: Service area under P.H.C Valsang, Solapur having a total approximate population of 42000.
Sampling frame: All pregnant women in rural field practice area under P.H.C, Valsang.
Sampling unit: Registered pregnant women in study area.

Results & Discussion: under analysis

Conclusion: under analysis


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Medical College & Kem Hospital, Parel, Mumbai -13.

Keywords: Adolescent Girls, Menstrual Hygiene

ABSTRACT
In India the age of menarche ranges from 10 to 16 years. The information regarding menstruation is in accessible to adolescents. Mothers usually are the most common informants. But the scientific perspective with reference to menstrual hygiene is yet to be main streamed in the adolescent girls.

Aims/Objectives:
1) To evaluate the perceptions & practices regarding menstruation and menstrual hygiene amongst adolescent girls.
2) To assess the profile of symptomatology experienced in relation to menstruation.
3) To suggest recommendations for planning effective health education regarding menstrual practices.

Material & Methods:
A Cross-sectional study was done in all the 114 adolescent girls who have attained menarche and are registered in the Anganwadies of Sakwar Sub center. Study period was from February 2012 to June 2012. The study group was divided into small batches and prestructured questionnaire was administered to individual participant followed by awareness session on menstruation and menstrual hygiene. The analysis of responses was done using spss 20 applying proportions and chisquare tests & those having physical complaints in relation to menstruation were referred to designate gynecologist of RHTC.

Results & Discussion:
Mean age of menarche was 13 yrs. Mother was the main informant (72.80%) for education regarding menstruation management. 20% participants use disposable sanitary pads, 21% clean the perineal area at least twice a day and 18% use soap and water to clean perineal area. Significant association is revealed between symptomatic complaints & menstrual hygienic practices. Abdominal pain (74.56%) was the most common complaint during menstruation, 26.32% girls consulted doctor about the menstrual problems.

Conclusion:
The findings indicate the need for promotion of focused health education programme on menstrual hygienic practices for adolescent girls, especially as apart of RCH Programme under NRHM.

Quality of Life And Nutritional Status Selected Adolescents of Chennai
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ABSTRACT
Background objective: Living in a proper environment with adequate food and nutrition are essential for proper growth and physical development, to ensure optimal work capacity, performance, and also to ensure the adequate immune mechanisms and resistance to infections. Improper environment adds up stress for the individual and under nutrition increases susceptibility to infection and disease. This in turn reduces the work capacity and productivity. The most vulnerable group are adolescents who are seldom recognized. A study has been carried out in Queen Mary's College, to attempt to link the quality of life, socio economic and environment aspects to nutritional profile of selected samples. The aim is to establish the opportunity for concerted interdisciplinary analysis that is needed for improving in the nutritional status of adolescents.

Subjects / Method:
Field work was undertaken using random sampling method. The data was collected from fifty adolescent girls who were
in their first year of undergraduate courses. The information pertaining to socio economic status, environmental factors, quality of life and nutritional status were enumerated through structured a questionnaire.

Results:
Complex socio economic factors, environmental factors, nutritional profile and quality of life were identified and found to be as much part of the research work as the complexity of the interdisciplinary project. These issues are catalogued and discussed. A preliminary evaluation analyzed the linking of quality of life and environmental factors to nutritional profile. The statistical analysis of data suggests major correlation exist between the selected variables of the quality of life and nutritional status.

Conclusion:
The study was an attempt and study to support the development of adolescents most vulnerable part of the society.

Morbidity Pattern and Personal Hygiene in Children Amongst Private Primary School in Urban Area - Are the Trends Changing?

Keywords: Hygiene, Morbidity, Private School, Health Problems, School Children

ABSTRACT
School health is an important intervention as great deal of research tells us that schools can have a major effect on children's health, by teaching them about health and promoting healthy behaviors.

Aims/Objectives:
1. To study common health problems and assess personal hygiene status amongst primary school children

Material & Methods:
A cross-sectional study was conducted in academic years 2009-10 and 2010-11, with three health check-up camps organized in private primary school of Pune city. Total 450 students were assessed for health problems and composite score of personal hygiene status was calculated ranging from zero to five by examination of hairs, nails, skin and clothes.

Results & Discussion:
Out of 450 students examined, 56.2% were boys and 43.8% were girls with age ranging from five to ten years. The major morbidities observed were dental caries (65.1%), URTI (38.2%), ear wax (29.9%) and myopia (10.0%). Mean hygiene score was significantly higher in girls (4.32) than boys (3.95) and poor hygiene observed in older boys.

Conclusion:
Increasing myopia and poor dental hygiene denotes a changing morbidity pattern in private primary school of urban area. Therefore, private primary schools should initiate periodic vision testing and dental examination by formal affiliation with an ophthalmologist and a dental surgeon. Additionally, school teachers should be trained for screening for vision testing and poor dental hygiene. The hygiene status of the girls is significantly better than boys.

Appropriate Technology & ICT in Rural Health

Empowerment of Rural People Through e-Health - A Case Study of Pravara

ABSTRACT
PIMS - DU believe in the potential of ICT as an effective tool to empower rural people to achieve sustainable health and development. Approach adopted was participatory; need based, integrated, with special emphasis on medical/health, agricultural and educational needs of the remote rural people.

Objectives:
1. Integrate ICTs with on going comprehensive developmental programs to addvalue.
2. Help communities to articulate their needs, create demand for information & services
3. Improve access, delivery and quality of health care services at Rural Health Centers by connecting them to a tertiary care hospital.
4. Serve rural masses through improved access to scientific information - agricultural, education etc to accelerate the socio-economic transformation invillages

Operational Area of the Project:
The e-health project consisting of 20 Rural IT Centres and a main hub at Loni Township is implemented in 40 remote and tribal villages covering about 150,000 people in six blocks in Ahmednagar district.
Services at the e-health centres

Conclusion
On an average daily 1000 rural people avail the services at these Centres. There were visible changes observed among the women, adolescents & youth and farmers pertaining to health awareness, health seeking behaviours, early detection of diseases & treatment, enhanced capacity building of rural health work force, economic viability of farming occupation, net savings of farming operations including pest management, seed selection, INM and IPM operations, getting optimal market prices for their products etc.

Ventilator A Necessary Technology for Rural Areas
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Keywords: Ventilation. Rural area. Snake bite.

ABSTRACT
This presentation is of a ventilator, a technology for long term artificial ventilation designed specifically for rural areas. To have a ventilator / respirator which can work easily and sustain in rural areas is a must, as it is here that more than 70% of Indian population lives and survives. Respiratory paralysis is a fatal complication of snake bites and O.P. Poisonings, and Long term artificial ventilation is the mainstay of treatment in venomous snake bite and O.P.Poisoning patients. Surveys estimate around 46,000/ snake bite deaths occur per year in India, out of which 97% are in rural areas. Also, almost all O.P.Poisonings are reported in rural areas as a result of easy availability and heavy use of pesticides. The W.H.O. classifies snake bite as the most neglected of neglected tropical disease in the 21st century. Snake bite and, O.P.Poisonings are also termed as the most neglected professional hazards for farmers, resulting in maximum mortality. Almost all the ventilators available today are pneumatically driven, which means they require gas or air under pressure as the driving force. Big compressors or oxygen cylinders are required to provide this pressure and maintaining these is extremely difficult. Electricity is available in rural India and is very cheap as compared to maintenance of oxygen cylinders and compressors So the main aim was to design an electrically driven ventilator, with a battery backup in case of power failures,) and most importantly to incorporate a simple manual mode of ventilation in case of total power failures. Also it had to be very simple to operate, so even paramedics would be able to operate it. Two years of hard work resulted in this innovation, which was commercially launched in October 1996, and was named NEWMON. (Pneumon means lung )Features of this ventilator include) Electrically operated, battery backup, and manual mode of ventilation.) It can be run on an ambulance battery also) The weigh of the ventilator is 7 Kgs. making it extremely portable.) A tidal volume range from 50 ml. To 1000 ml.) Respiratory rate adjustable from 8 to 24 breaths per minute.) A analogue dial display of airway pressure.) Five step adjustable low and high pressure alarms. Because of the above mentioned properties, it is still the only ventilator which can practically be used in rural setups. Numerous rural hospitals, Mission Hospitals, Ambulances have this and till date it has proved to be very useful for thousands of snake bite and O.P.Patients. It has also been used for ventilating patients with permanent respiratoryparalysis at their homes. These would have not survived without ventilator support, and hospitalisation for years together, paying a rent of a minimum of Rs. 500/ day, was out of question. It was awarded the Antia-Finseth National award in 2001, and G. S. Parkheaward in 2002.

Clinical Utility of Electronic Balance Board and Treadmill Training in Pott’s Paraparesis: A Case Study
Dildip Khanal, Subhash Khatri, R.M. Singaravelan, Deepak Anap

Key words: Computer Dyno Graphy, Pott’s Paraparesis, Post Polio ResidualParalysis, Balance, Treadmill, Physiotherapy

ABSTRACT
Pott’s Paraparesis is one of the serious manifestations of Tuberculosis of Spine. The presence of Post Polio Residual Paralysis (PPRP) in one of the lower extremity adds to the seriousness of the sufferer. There is hardly any study about the electronic balance board and treadmill training in patients with Pott’s Paraparesis as well as PPRP. Therefore, the objective of this study was to find out the clinical utility of electronic balance board & treadmill training.

Methods:
A 33 years old male patient with a diagnosis of early onset grade 2 Pott’s Paraparesis for eight months along with right lower limb PPRP since childhood participated in this study. He was trained with Electronic Balance Board training for 15 minutes, Treadmill Training for 20 minutes and conventional physiotherapy for 45 minutes of 36 sessions over the period of six weeks andthe outcome was assessed with Berg Balance Scale (BBS), Electronic Balance Board Score (EBBS), Spinal Cord Independence Measure (SCIM), Walking Index for Spinal Cord Injury (WISCI) and Computer Dyno Graphy
Results: The results of this study showed 41.07% improvement in BBS, 50% in EBBS, 13% in SCIM, 30% in WISCI and in gait parameters such as Left/Right symmetry by 3.38%, single support time (left by 4.57%, right by 13.93%), double support time (left by 62.92%, right by 56.03%), single swing (left by 13.93%, right by 15.23%), stance (left by 49.16%, right by 47.64%) and step time (left by 45.14%, right by 43.20%).

Conclusion: Electronic Balance Board and Treadmill Training may be used as an adjunct to Conventional Physiotherapeutic Rehabilitation of Pott’s Paraparesis along with PPRP patient.

Global Positioning System – A New Tool to Measure the Distribution of Anaemia and Nutritional Status of Children (5-10 years) in a Rural Area, South India
Malatesh Undi, Nr Ramesh Masthi, Sathish Chandra MR, Aravind M, Yannick P12. Tutor-Cum-Postgraduate, Department Of Community Medicine, Kempegowda Institute Of Medical Sciences, Bangalore-70, Karnataka, India.

Keywords: Global Position System (GPS), Anaemia, Stunting, Thinness

ABSTRACT
The Global Positioning System (GPS) is a satellite based navigation system which is of late being used in the health field.

Aims/Objectives:
1. To describe the geographical distribution of anaemia and malnutrition with GPS. 2. To assess the prevalence of anaemia and malnutrition in children aged 5-10 years.

Material & Methods:
This exploratory study was conducted over a period of 2 months in the rural practice area of a medical college situated in Bangalore during the months of June - July, 2012. Children in the age group of 5-10 years of age were the study subjects.

Results & Discussion:
GPS was used for describing the geographical distribution of anaemia and nutrition status on the google earth map. The prevalence of anaemia in the study subjects was 8.7%. The prevalence of underweight was 52.8%, stunting (28.5%), thinness (23.5%), severe thinness (29.1%), however overweight and obesity was observed only in 0.9% and 1.2% of the study subjects respectively.

Conclusion:
GPS was easy to use and helpful to demonstrate the actual distribution of morbidity at the household level in the rural area.

An In-house approach to combat Micronutrient Deficiencies in Madiya Tribes of Gadchiroli.
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Key Words: Madiya, Ambil, Micronutrient deficiencies

ABSTRACT
Madiya tribes of Gadchiroli District of Vidarbha region, India are known for formal nutrition. They consume a fermented rice preparation (Ambil) as their sole food which is deficient in B-complex vitamins. Interventions by other food supplements but they were unacceptable to tribes. Thus it was thought to improve B-Complex levels by applying in house approach which is acceptable.

Aims/Objectives:
To overcome micronutrient deficiencies, to combat gastrointestinal infections.

Material & Methods:
Samples of Ambil were analyzed for microbial load and proximate composition as per AOAC and ICMR methods. Bacterial isolates showing antimicrobial activity and vitamin production were subjected for 16SrDNA/PCR analysis for identification. Fermentation conditions of AMBIL preparation were standardized by using lactic and other isolates.

Results & Discussion:
Results indicate that judicious use of lactic cultures, B. pumillus increase the levels of B-complex vitamins appreciably.

Conclusion:
The in house approach, thus serves the objectives.

Sociodemographic Evaluation of Home Deliveries in Taluka Saoner, Distt. Nagpur in the Year 2011-12
Dr. Mrs. Rajratna Nityanand Ramteke, Maharashtra Medical Health Services

Keywords: Evaluation Home-Deliveries Saoner 2011-12
ABSTRACT
Reducing home deliveries and promoting institutional deliveries takes centerstage in lowering Maternal Mortality. Various schemes are launched under NRHM for the same
Aims/Objectives:
To study causes of home deliveries in rural setup of Saoner Taluka District Nagpur To propse remedial actions to reduce home deliveries
Material & Methods:
Cross-sectional community based descriptive study conducted in rural areas of Saoner Taluka, Distt Nagpur for the year 2011-12 to study various factors associated with home deliveries.
Results & Discussion:
Out of Total 1028 deliveries, 27 (2.6%) were home deliveries. Of these mothers, 16 (59.2%) were illiterate, 21 (77.77%) belonged to S.E. Class III & IV, 14 (51.8%) belonged to reserved category, 17 (62.9%) were multiparous women. Common reasons were Spontaneous delivery in 5 (18.51%), Delay in Decisionmaking 7 (25.9%), Delay in arranging transport 8 (29.6%), preconceptions 5 (18.51%), unsatisfactory health service 3 (11.11%) Conclusion:
Delay in decision making and delay in arranging transport are the leading factors for home deliveries. Improved implementation of JSSK scheme and interpersonal communication can be remedial to discourage home deliveries

A Cross Sectional Study to Assess the Scope, Implementation, and Utilization by Rural Area of Telemedicine System Located in an Apex Institute.
Dr. Sumit ghansham wasnik, Dr. R.R.Shinde, Dr. Kamaxi bhate,Seth GS medical college and KEM Hospital, Parel, Mumbai, 410002
Key words- Telemedicine, rural health, second opinion
ABSTRACT
Several reasons have spurred the rapid growth of telemedicine in India. The country is geographically large with many towns and villages located in remote rural areas. Few medical facilities exist to serve the large population that resides in the villages. India has 80% of its main health-care centers located in cities that host only 30% of the population. These percentages reveal a dismal healthcare scenario where only 20% of India's quality health-care facilities cater to 70% of Indians (approximately 770 million) confined to rural communities Telemedicine is “The practice of medical care using interactive audiovisual and data communications including medical care delivery, diagnosis, consultation and treatment, as well as education and the transfer of medical data (WHO)”
Aim-
To evaluate the use of Telemedicine facility by rural area for the benefit poor people.
Objective-
1. To assess pattern of use of telemedicine facility by connected rural district hospital
2. To assess the profile of morbidities referred from rural area for guidance from apex hospital through the telemedicine unit
3. To identify strengths and weakness of present telemedicine services
4. To gain practical insight for efficient management of telemedicine
Methodology-
Retrospective data analysis of cases referred to telemedicine department of an Apex Institute KEM Hospital Mumbai from June 2010 to May 2012
Study Unit: Cases referred (Case documents / audio-video records) to telemedicine department of an apex institute.
Sampling Method: All the cases referred to telemedicine department are included in the study.
Study Period: Data collected from telemedicine department of apex institute of last two year from June 2010 to May 2012 Data were entered using Microsoft-Excel 2007 Software.
Results-
1) Referrals for diagnostic opinions predominate amongst the total cases reported through telemedicine
2) Most cases were referred for “second opinion”. However establishment of professional networking and main streaming of institutional competency s an added advantage.
3) There are 6185 patients referred with majority for radiology and orthopedic department.
Conclusion- There is increasing number of patients who are using telemedicine facility

Rural Health 2.0 and User Driven Health Care
Shoubhik Bose, Sumon Sadhukhan, Shamik Ray Independent researcher. Accenture Services Pvt. Ltd., Pritech Park (Sez) Block 7, Outer Ring Road,Bellandur Village, Varthur Hobli, Bangalore – 56010
Keywords: Web 2.0, Collaboration, Algorithms, Health 2.0
ABSTRACT
This paper discusses the paradigm shift that web-based technologies can bring in the healthcare system. Instead of replacing the existing systems, we shall extend it to deliver accurate diagnosis by dissolving physical and social constraints to develop healthcare analytics. The problems discussed here range from work arounds developed for lack of adequate healthcare facilities in rural areas to alarming health issues affecting the youth.

Aims/Objectives:
A repository of health “Q & A” will be developed. The system would lessen the need for the average care-seeker to go from one clinic to another. The youth will come forward with health issues arising from substance abuse. Our work is geared towards radically improving the current 2000 care-seekers to caregivers ratio, the ideal being 500, to 5-10 networked caregivers per care-seeker.

Material & Methods:
Health issues will be submitted using a web-interface, mobile text messaging or by voice using a speech-to-text software. As a work around for Internet connectivity issues, users can opt for offline caching of health data, static and dynamic version of the same web based application. Social issues will be addressed by crowd-sourcing using social applications. Algorithmically, the web 2.0 system will predict similar health issues from trusted Internet sources.

Results & Discussion:
The functional testing of the beta version of the application gave positive results; however, we are working on improving the performance for slow internet connections. We are remodelling the database architecture as the RDBMS did not scale well with non-structured data. The patient name identifiers removed from the scanned reports manually will be substituted by algorithmic removal.

Conclusion: The high response by the urban and rural citizens including care-givers has proven the need of collaborative solutions for disseminating healthcare solutions. The success of the model lies in its adaptation by the care-seekers and care-givers.

Alternative & Indian System of Medicine

Yoga as an Effective Means of Health Management
Subodh Tiwari

ABSTRACT
Yoga is an cultural heritage of India. It is defined as an art of living and science of experience. Though the ultimate aim of Yoga is spiritual enhancement, but most of the practitioners, practice it for Health and Healing. The preventive and the therapeutic aspect of Yoga gained scientific momentum after the Scientific Research in Yoga started in Kaivalyadhama Yoga Institute, by Swami Kuvalyananda. Through his experiments he proved the efficacy of Yogic practices on various conditions. His institute was regarded as the world capital on Yoga research in earlier 19th century. With passage of time the scientific research in the field of Yoga grew stronger and we had strong evidence of positive effect of Yoga practice on Asthma, Diabetes, Hypertension, Arthritis, Memory, Concentration, Obesity and manymore conditions. The classical Yoga as laid down by Maharishi Patanjali prescribes eight limbs,Yama (Interpersonal codes), Niyama (Intrapersonal), Asana (Postures), Pranayama (Breathing practices), Pratyahara (ability to restrain), Dharma(Concentration), Dhyan (meditation), Samadhi (state of harmony). Through practice of whole of part, Yoga has shown significant influence in improving physical and mental health of the practitioner. In times when health is a major concern due to increased stress, deteriorating environmental conditions, increased pollution, Yoga will play a major role in maintenance and promotion of health. It is one of the most cost effective interventions, which only requires a 3’ X 6’ of place and a mat to practice. It is quite safe when practiced with duecare. Therefore, inclusion of Yoga intervention as alternative therapy or complimentary therapy would be of great significance. Karambelkar, P.V., Deshpande,R.R. and Bhole, M.V. (1983). Oxygenconsumption during pranayama, Yoga-Mimamsa, 14 (3&4): 7-13.Sahu, R.J. and Gharote, M.L. (1984). Effect of Short Term Yogic Training Programme on Dexterity -A Pilot Study, Yoga-Mimamsa, 23(2):21-27.Sahu, R.J. andBhole, M.V. (1984). Effect of Two Types of Pranava (Om) Recitations on Psycho-Motor Performance, Yoga-Mimamsa, 22 (3&4): 22-30. Gore, M.M., Bhogal, R.S. and Rajapurkar (1990). Effect of Trataka on Various Psycho-Physiological Functions, Yoga-Mimamsa, 29 (3), 18-32.Kulkarni, D.D. (1998). Orienting Reflex In Shavasana Practice and Shavasana Imagery,Yoga-Mimamsa, 34, (1):27-36.

Evidence Based Translational Research in Vascular Blocks
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Keywords: Coronary Artery Disease, Ischaemic Heart Disease, Deep Vein Thrombosis
**ABSTRACT**

**Need:** Medical treatments (Invasive & Non Invasive) have not proved to give lasting results in CAD/IHD & Stroke cases which are number 2, NCD killer diseases in world. If patient survives, suffers partial or permanent disability resulting in burden on family & reduced outputs for family & nation ultimately. Recurrences of symptoms are known. Long term medication carries risk of side effects. Our data shows that more than 50% patients need additional or alternative modality of treatment in Heart attack & stroke. There is a global need for such system which is Practical, Scientific, affordable, accessible, and easily available.

**Target:** Reverse Atherosclerosis, Dissolve blood clots, Improve tissue perfusion / collateral circulation. Achieving total relief in shortest possible time along with functional stability has been always the main aim.

**Concept:** Integrate in a holistic protocol best in modern medicine + Ayurved+ lifestyle changes (As possible). Allopathic medications are continued to begin with and later tapered/stopped depending on response. Ayurvedic formulation Cap Sved (FDA approved) is processed polyherbal formulation with natural nutritional supplement Cow Colostrum (containing various immunoglobulins & growth factors) (FDA approved).

**Study Results:** Patients start responding clinically in 7-10 Days. Treatments are continued for 3-4 months & Stopped. Allopathic medication is tapered/stopped as per need of patient. Few patients followed up for more than 5 yrs are functionally stable & asymptomatic after stopping the treatment. Remarkable results are seen clinically, functionally, and on investigation parameters like ECG, Stress Test, 2-D-Echo, Stress Thallium Scan, Coronary Angiography, Colour doppler studies, MRI, CT Scan. The medicines have been used in otherwise healthy patients having Diabetes & Hypertension & have shown remarkable regression to normal in Atherosclerosis plaques.

**Simple Meditation & Japa for Creating Strong Mind for Strong Body or Self-Management Skills Through Meditation/Japa for Better Health**

Mr. Shriniwas Rairikar, Founder Director, Dasbodh-Gita Management Academy, Pune.

**Keywords:** Simple Meditation creates Strong Health

**ABSTRACT**

Strong mind is necessary for better self management at physical and mental level. Only medicine do not work in many ailments unless positive and strongmind is supporting the body. Our culture and heritage has given this great knowledge of meditation and Japa, making mind positive, matured, stable and immuned to many diseases. There are many simple techniques of meditation which can easily be practised by Rural Community also.

**Aims/Objectives:**

Create Awareness amongst Academecia and society at large that only medicines will not work for better health of Rural or any community but we have to use and implement our heritage of the knowledge of Meditational practices along with to create strong, ethical minds with good habits to prevent the ailments. Especially psychosometic diseases are increasing every where and crimes and bad habits are also increasing due to lack of self-management skills in people and the Meditational practices of simple nature can change the scenario substantially.

**Material & Methods:**

Knowledge, practice and experience sharing. Methodology and demonstrations of meditation along with discourses on Value/Vivek education to communities reaching to their hearts for the transformation of permanent nature. I preach many methods of meditation but most simple and effective is, watching owns’ puls sensation for focussed attention for improving concentration and self-management abilities perpetantly.

**Results & Discussion:**

With training of one month each and the further follow up a grat transformation can happen in the lives of the community.

**Conclusion:**

Let us just not stop on medication and similar methodologies but try to reach at the root level/minds for better health of ‘Rural Communities’. This preventive methodology will prove very beneficial in short and long-run.

**Prakruti – Individualistic outlook**

Dr. Anura P. Bale Gomantek Ayurveda Mahavidyalaya & Research Centre, Vazem, Shiroda-Goa.

**Key Words:** Prakruti, Individualistic Medicine, Disease Prevention.

**ABSTRACT**

Healthcare systems in vogue today tend to take a uni dimensional approach towards healing with each individual being treated as same. Ayurveda theancient Indian science of healing takes a highly individualized approach. Every individual is classified based on his or her physical and mental attributes, as belonging to any of the three types of prakritis viz. Vata, Pitta and Kapha. This classification based on inborn metabolic pattern helps the physician to understand the relationship between the body and nature. The prakriti of an individual is formed based on healthy sperm and ovum, diet and regime of parents and environmental factors. Individualistic approach in diagnosing the disease and prescribing therapeutics
taking into consideration the reactive capacity and response behavior leads to near to perfect medicine. It is similar to genomics in the modern genetics. The presentation tries to further elaborate this concept and to highlight the fact by understanding oneself and making suitable changes in diet and lifestyle, one can enhance longevity and quality of life thus reducing burden on already stretched healthcare systems especially in rural settings.

**Investigation of Age-Related Differences in the Prophylactic Effects of BCG Intravesical Instillation Therapy Against Non-Muscle-Invasive Bladder Cancer in Japanese Rural Area**

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1Department of Urology, J.A. Aichi Anjo Kosei Hospital; 2Department of Urology, J.A. Aichi Toyota Kosei Hospital; 3Department of Nephro-Urology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan

**ABSTRACT**

The guidelines on treatment options for prophylactic use of BCG against nonmuscle-invasive bladder cancer change every few years. We implemented retrospective comparison to clarify differences in BCG efficacy by age in Japanese rural area.

**Patients And Methods:**
A total of 146 cases of non-muscle-invasive bladder cancer treated with BCG since February 1985 were retrospectively evaluated around our rural hospital area. All patients received 80 mg of BCG (Tokyo 172 strain) six to eight times a week for prophylactic use. Comparison was made among three historical groups (Group A: 1980s, 39 cases; Group B: 1990s, 61 cases; Group C: 2000s, 46 cases).

**Results:**
In total, recurrence was seen in 55 of the 146 cases (37.7%), progression was seen in 14 cases (9.6%), and 1 patient died of cancer. These results were similar to those outlined in previous reports. However, the outcomes of this age-based analysis indicated a tendency for a shorter time to recurrence in patients after 2000, although a log-rank test showed no significance (P = 0.229). Seven of the cases of progression (i.e., half of all such cases) were among the 46 Group C patients (15.2%). Excluding these progressive cases, there was no significant difference among the remaining 132 patients in the three groups.

**Discussion And Conclusions:**
This study results revealed a trend showing a low non-recurrence rate since 2000 in our series. This is thought to stem from a number of factors, including changes in BCG indication criteria and the evolution of histopathological

**To Find out the Scientific Way of Homoeopathic Management for the Patient Suffering From Psoriasis.**

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**Keywords:** Psoriasis, Stable Plaque, Homoeopathy, Nitric Acid.

**ABSTRACT**
A study of 68 patients suffering from Psoriasis, treated with homoeopathy in primary care over a period of 1.5yrs, shows significant improvement in their quality of life & total improvement in symptoms of Psoriasis, many of patient had suffered from Psoriasis for as long as 10-15 yrs, & had previously unsuccessfully tried conventional treatment.

**Aims/Objectives:**
“To detect high risk patient, to promote, protect, & maintain the health. ““To evaluate detail effect of homoeopathic treatment in patient with Psoriasis.”

**Material & Methods:**
Clinical protocol consist:- consent of all patient is taken before case taking for research which consist standardized questionnaire, recording. Investigations, complaint severity, diagnosis, health related quality of life, medical history, consultation, treatment strictly based on individualization.

**Results & Discussion:**
Each case is discussed with regards to disease diagnosis selected remedy, dose & its outcome. Out of 68 patients (Both sexes) 46 patients- Improved totally, 10 patients – status quo, 12 patients- dropped.

**Conclusion:**
“Result of this study demonstrates use of homoeopathic remedies generally safe, economic, well tolerated & efficacious in treatment of psoriasis.”

**The Radical Role of Medicinal Plant Extract in Stem Cell Therapy of Incurable Diseases**

Dr. K.V. PathakShivneri Rugna Seva, Guru, Ayurved Hospital & ResearchCenter Ramkrishna Nagar, Vasmat Road, Parbhani, Maharashtra
Keywords: Rural Health

ABSTRACT
The world is being attacked by new maladies and the medical sciences are finding new remedies to grow with several new discoveries and newer approach for deteriorating conditions that are directly affecting our health. Ayurveda is making significant contributions to these discoveries as new medical world is leaving no stone unturned and revival of ancient medical practices is a resultant of growing awareness on health issues.

Aims/Objectives:
Using medicinal plant extract is a very ancient method; in fact the present day ayurvedic methodology is being applied in a very superficial way as we tend to use particular herbs for particular ailments. Our experience tends to put forth that disease is a cause of organ disorder and if this disorder is corrected the organ restarts the proper function thus the disease is cured and to make it happen, diagnosis plays a very important role. We have developed a method of Nadi parikshan (pulse examination) through nadi graph, which enables to pinpoint the disorder and use the particular medicinal plant abstract to repair the organ and restore its function. We have been dealing in medicinal plant extract in treatment and used it effectively to treat disorders like spinal atrophy, Muscular Dystrophy, Cerebral palsy, psoriasis, etc.

Material & Methods:
This method is an alternative to the costlier options of metabolic surgery and stem cell therapy as it is much cheaper.

Results & Discussion:
We have case studies to show the effectiveness of the formulations.

Conclusion:
This kind of interventions can prove to be beneficial to the rural health, especially in the third world countries and the opportunities to develop these medicines at the rural or micro level can strengthen the rural economy to establish their right on health.

Role of Ayurveda in Health Care System of India
Dr. A.J. Dixit, Dr. J.V. Dixit, Kalpataru, Mayanagar, CIDCO-N2, Aurangabad-431006

Key words: Ayurveda, Primary Health Care, India

ABSTRACT
Ayurveda is ancient medicine system of India with history of around 5000 years. Many renowned physicians and surgeons like Charak, Sushruta, Wagbhat etc lead the path towards holistic health in ancient India. Swasthavritta, the art and science of well being, is a special feature of Ayurveda. It corresponds to some extent with Preventive and Social Medicine of modern medicine. The rising cost of urban elite centred modern medicine makes it mandatory to search for cost effective and scientific ways of tackling health problems of people of India in general and rural and tribal people in particular. The article tries to examine the possibility of Ayurveda replacing modern medicine at least in the primary health care.

Methodology:
This is a review article. Literature related to Ayurveda and Primary health care in India is reviewed thoroughly. The attempt is made to develop an alternative mechanism for providing primary health care to people of India which will be scientific, effective, cheap and universally accessible.

Conclusion:
Ayurvedic medicines provide a better option for India as far as primary healthcare is concerned. These medicines are cheap, effective, and easily available near the house and can be handled by the people. It is concluded that government should seriously think and try to utilize Ayurvedic medicines in Primary Health Care delivery system of the country.

Assesment of Ayush Facilities and Services Under NRHM at A Southern District of Rajasthan
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Keywords: Ayush, Phc, Chc, Dh

ABSTRACT
The convergence of AYUSH with the Allopathic health services under NRHMis meant to provide choice of treatment systems to the patients, Strengthen facility functionality and Strengthen implementation of the National Health Programmes. The Indian Public Health Standards (IPHS) have stated the minimum requirement of human resources, infrastructure, drugs and logistics for implementation of the Mainstreaming of AYUSH.

Aims/Objectives:
The present study aimed to assess and evaluate AYUSH facilities and services in Udaipur district after main streaming under NRHM in conformance with the standards set by IPHS.

Material & Methods:
A cross sectional study was conducted in all primary and secondary level health institutions where AYUSH Doctors
posted in colocation with allopathic doctors under NRHM in Udaipur district of Rajasthan spanning one month duration in 2011. Data was collected on predesigned and prestructured performa through observation, records available and interview of AYUSH Doctors, District AYUSH Coordinator.

Results & Discussion:
AYUH Doctors posted at 33 PHC’S, 3 CHC’S and 1 District hospital of Udaipur district. 11 of them are posted as incharge of PHC’S. Only 30% PHC’s and 33.3% CHC had separate room for AYUSH Doctors. Adequate furniture and equipments available only at 39% PHC’S and 33.3% CHC’S. Sufficient drugs not available at majority of facilities. Majority of doctors (69%) achieved their target of treating at least 30 patients per day in OPD. Only at 60% of the PHC/CHC/DH, posted AYUSH Doctors had taken skill birth attendant training and assisting or conducting deliveries on their own. Rest of the findings will be presented in power point.

Conclusion: There is need to ensure availability of AYUSH manpower, furniture, equipments, drugs and regular proper trainings regarding selected preventive and curative health care activities.

Rural Health Research

Health in Transition: A study of Disadvantaged People in Rural Areas
Dr. P.C. Upadhyaya
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ABSTRACT
This study deals with the existing health care pattern found among the villages in North India especially in Uttar Pradesh and its consequences on the health of the rural people which are living as marginalised, disadvantaged and vulnerable living in the villages in Mirzapur and Allahabad District in Uttar Pradesh. This study further explores the present health condition and its outcome which largely affect the people living in the villages and what are the challenges they face in order to tackle the diseases occurring among them. Many disadvantaged sections including rural poor, illiterates and destitute suffer from many diseases and the health centre is not so operative for them, resulting into deaths and burden. It further questions on the role of the state in rural health care and what next to be done to improve them. In short, there is no any emergency care to save their health condition and treat the patients who have infections and symptoms. The other section of the paper deals with the socio-cultural beliefs and practices by which they are confronted and how they form their health care beliefs and pattern of diagnosis. The situation is so critical in most remote and backward areas of the state that they deprive health care facilities and people are sick and face health disaster i.e. burden of diseases. The study further reveals the role of Private Doctors mushrooming in the areas concerned and how they treat the patients in their style and how the Primary Health Centre covers the rural patients for their treatment which is nearer fromthe rural community. Secondly, in the case of maternal and child health, how the present cure and treatment are effective to treat the pregnant women and newborn babies in the rural villages. In order to examine the health problems of the rural people, some personal interviews have been taken. This paper is based on first hand data and observation about the existing health care system in the villages and traditional cure and therapeutics they adopt in order to diagnose diseases prevalent among them. As far as the traditional medicine is concerned they practise to cure certain diseases as jaundice, cough, cold, fever and skin related etc.

Swot Analysis of Public Private Partnership of a Primary Health Centre in Kolar
Ranganath B G
Professor & Head, Dept. Of Community Medicine, Sri Devaraj Urs Medical College, Kolar
Keywords: PPP, PHC, SWOT, Public Private
ABSTRACT
The government of Karnataka is outsourcing the primary health centres (PHC) to private agencies to improve the managerial efficiency, quality and utilization of health services. The department of community medicine at Sri Devaraj Urs Medical College in Kolar district of Karnataka state is administering one PHC under the public private partnership (PPP) model since the past two years.

Aims/Objectives:
To undertake a SWOT analysis to know the advantages of PHC functioning under PPP and problems in the managerial performance.

Material & Methods:
An inventory of internal strengths and weaknesses in the organization was made. This was followed by assessment of the external opportunities and threats based on the overall environment.

Results & Discussion:
The perceived strengths were ability to appoint and fill the posts which were vacant for many years, providing medical services all the 24 hours and utilization of resources from the medical college like accommodation for the doctors, transport facilities in the field, referral hospital facilities, drugs and manpower. Employment of staff on an annual
contract basis is a perceived weakness. There is frequent turnover of medical officers as they work for short periods. Perceived poor support from some of the district and taluk level supervisory staff and the community is an issue. Opportunities exist for the medical college to repair and maintain the infrastructures in the PHC and subcentres and to earn the good will of the community by providing quality services. The perceived threats are: poor acceptance of the PPP from politically influential members of the community and their interference in the functioning of the health centre leading to low morale among the staff.

**Conclusion:** The analyzed internal strengths and weaknesses of the PHC under PPP and the external opportunities and threats will be used to create an action plan for furthering the efficiency and consumer satisfaction, reduced swallowing function and cognitive function and poorer levels of ADL at the start of home care.

**Efficacy and ethics of artificial nutrition supply in patients with neurologic impairments in home care at the rural setting in Japan**

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**KEY WORDS:** Efficacy and Ethics; Home care; Home parenteral nutrition; Percutaneous endoscopic gastrostomy

**ABSTRACT:**
Following World War II, the Japanese have become the longest-lived population in the world because of a decreasing death rate for all ages that has accompanied improvements in public health, enhancement of the medical care system, and improvement of the standard of living. Now, the number of elderly persons who require medical and nursing care is markedly increasing.

**Aims/Objectives:**
Outcomes, particularly survival, for home-care patients with neurologic impairments who receive artificial nutrition, such as home parenteral nutrition (HPN) or percutaneous endoscopic gastrostomy (PEG), remain unclear. The efficacy of tube feeding for life prolongation in elderly patients remains controversial. The aim of this study was to assess the survival of elderly patients with neurologic impairments after the start of HPN or PEG.

**Material & Methods:**
We retrospectively evaluated 80 patients with neurologic impairments who had received home care before they died. They were divided into three groups according to feeding method: oral-intake group (n = 23), HPN group (n = 21) and PEG group (n = 36). The factors considered were: age; survival period after home care started; level of swallowing function; serum albumin concentration; level of activities of daily living (ADL); and levels of behavioral, cognitive and communicative functions.

**Results & Discussion:**
Survival periods of the patients in the PEG (736 ± 765 days) and HPN (725 ± 616 days) groups were twice that of the self-feeding oral-intake group (399 ± 257 days) despite lower serum albumin concentration (for PEG patients), reduced swallowing function and cognitive function, and poorer levels of ADL at the start of home care.

**Conclusion:**
Almost all patients were incapable of deciding whether they should receive artificial nutrition or not owing to dementia or poor comprehension. Physicians should provide clinical evidence to the families before performing PEG or HPN and support their decisions to maintain the dignity of the patients.

**Functional Electrical Stimulation (FES) - An Indigenous Mode of Stimulation for Foot Drop Patients**
Saikrishnan.V. & Aditi BhandiwadAsst Prof, Dept of Physiotherapy, JSS Hospital, Ramanuja Road, Mysore - 4

**Key Words:** Foot Drop, Functional Electrical Stimulation (Fes), CostEffective.

**ABSTRACT**
Rehabilitation engineering is an interdisciplinary area which requires collaboration between various professionals. There are various modes of conservative rehabilitation methods being used for patients with foot drop which develops due to various causes like UMNL or LMNL. This system of FES has been developed to fasten the rehabilitation process by being affordable, patient friendly with minimal maintenance.

**Aims/Objectives:**
To develop affordable FES system for treatment foot drop patients to obtain normal gait in community setup with local resources. To evaluate effectiveness of FES in correction of foot drop gait.

**Material & Methods:**
Patients diagnosed with foot drop due to UMNL from villages around Mysore District referred for physiotherapy rehabilitation. Materials- Portable FES stimulator, shoe designed by a local cobbler with a foot switch at the heel, carbon electrode and leads. Patient is made to walk 4m to note the gait deviations, the same patient is made to walk with FES to
note the note the differences in gait. The score is analyzed using Wisconsin Gait Score.

Results & Discussion:
The study showed significant improvements in the gait after using the FES. It also showed better dorsiflexion movement of the foot that prevented compensatory movements like excessive hip, knee flexion thereby providing better gait patterns. The system is cost effective, low maintenance made with local resources like shoe, cables, foot switches which can be easily utilized by the patients at rural areas.

Conclusion:
FES has been found to be effective in correction of foot drop being affordable, easily available resources and low maintenance use and can be prescribed as a mode of treatment for patients with foot drop.

Community Based Monitoring and Planning of Health Services in Maharashtra A Process to Improve Access, Accountability and Quality of Health Services
Dr. Nitin Jadhav, SATHI- Support for Advocacy and Training to Health Initiatives, Kothrud, Pune-
Keywords: Accountability, Monitoring

ABSTRACT
In present scenario, people are turned up with Public Health care system and unfortunately their main choose for availing Health care services is Private Health care system which is un-regularized and exploitative. So in order to bring people again to Public Health system, to build capacities of people regarding their Health Rights and to strengthen Public Health system, Community based Monitoring and Planning process (CbMP) under National Rural Heath Mission is being implemented in 780 villages of 13 districts of Maharashtra. CbMP is a form of public oversight where the rural communities that NRHM is intended to serve actively and regularly monitor the state of their local public health system as an input to improving the health services received by them.

Aims/Objectives:
- To build the capacities of community so that they able to monitor the local Health system.
- To create spaces for dialogue between community and Health system.
- To bridge the gap between different stakeholders those are centrally involved in decision making process.

Material & Methods: Key Processes of CbMP 1. Capacity and awareness building of community regarding the Health Rights and the entitlements which are declared by NRHM. 2. Formation of Multi-stakeholder monitoring committees for monitoring Health at different levels. 3. Collection of information/feedback from community about Health system by preparing and displaying ‘Report Card of Health services’. 4. Organisation of ‘Jan Sunwai’ (Public Hearing) with mass participation at different levels, where this information and cases of denial of health care are presented, public health officials respond and expert panelists recommend remedial actions.

Results & Discussion:
Quantitative Improvements- Between 2008 and 2011, four rounds of grading of services have been carried out, maternal health services being one key aspect. Analysis of data regarding provision of ante-natal services and proportion of public health institutional deliveries during these four rounds illustrates an improving trend in provision of ANC services in CBM areas of four pilot districts - Amravati, Nandurbar, Pune and Thane over the period. The proportion of ‘good’ ANC services in CBM areas has increased from 53% to 72% while services rated as ‘bad’ have declined from 12% to 7%. Increase in institutional deliveries in PHCs was compared between PHCs covered by CBM and the average for PHCs in entire district, in Thane and Pune districts. Significantly higher increase in institutional deliveries was reported from CBMPHs (101% in Thane and 105% in Pune) compared to district average (48% in Thane and 10% in Pune).

Qualitative Improvements:
- Frequency of visits of ANM and MPWs in villages has led to improved village health services in many villages; there is definite improvement in immunization coverage in these villages. • Certain sub-centres and mobile units which were not working have now started functioning. • JSY beneficiaries are now being paid the rightful amount after being raised in the CBM process. • Practice of prescribing medicine from private shops has largely stopped. • Illegal charging and private practice by certain medical officers has now stopped.

Effect of Economic Security on Health of Elderly Women: A Study of Rural India
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Keywords: Elderly Women, Rural, Economic Dependency, Health

ABSTRACT
The patriarchy nature of Indian society has always given women a secondary status and the situation is worse in rural India where there is lack of infrastructure as well. In old age Indian women suffers from triple jeopardy i.e. old, poor and female. There is dearth of studies that have attempted to assess the health and economic security of elderly women living in rural areas.

Aims/Objectives:
To assess the association of economic security with self-reported health status of elderly rural women in India.

Material & Methods:
The study has used data from 60th round of National Sample Survey focused on Morbidity, Health Care and the Condition of the Aged. The sample size for the study is 10,737 which are enough to carry appropriate bivariate and multi variate analysis.

Results & Discussion:
Analysis clearly reflects the positive association of economic security with self-reported health status of elderly women. Those women who are economically self-dependent reports better health status (82%) as compared to those who are economically not dependent (70%). There is not much difference among women who are partially self dependent and fully dependent in reporting of good health status. Nearly three fourth of elderly women report good health. This is indicative of scenario where women themselves do not realize their morbid condition and hence tend to report good health.

Conclusion:
Health status and economic security of elderly women, particularly those living in rural areas have remained an ignored section of research. It is believed that a woman is economically dependent on her husband; however, the present study brought into light the positive association of being economically self-secured on health status of elderly women. This necessitates the need of making a woman economically independent. Women in urban areas are increasingly becoming self-dependant; this change has to be brought in rural areas.

Food Expenditure Pattern of Village - PMT District of Tamilnadu
Sylvia Fernandez, National Institute Of Nutrition, Hyderabad

Keywords: Expenditure Pattern Food Item Nutrition Education Intervention

ABSTRACT
Food consumption and nutritional status are closely associated with each other. The quality and balanced diet intake gives good nutritional status and health. There are various factors involved in practicing the right food intake, mainly knowledge, income, food availability, food price, food preference, culture and healthy eating practice. According to the National Nutrition Monitoring Bureau reports revealed that rural Indian population are undernourished and poor in Nutritional status. To find out the reasons for this with the following objectives the expenditure pattern on different food items are measured with the rural population.

Aims/Objectives:
• To measure the expenditure pattern on different food item.
• To measure the quantity of food item per week.
• To measure the amount spend on different processed food and as well as hotel food

Material & Methods:
Pre-tested interview schedule was used to collect the information. According to the purchasing level the expenditure was calculated at the time of food prices. Based on the data lacunae were identified to provide the knowledge appropriate communication material was developed to conduct nutrition education intervention for the same population.

Results & Discussion:
Rice is the major cereal intake of that area. Twenty seven percent of the respondent spent 30-49 rupees per week. Similarly they spent amount for pulses and legumes also all the vegetable together they are buying 2-3 kg per week. For that most of them are spending 30-49 rupees per week. It is observed that oil usage is very high it is beyond the recommended amount. Where as they are spend very minimum amount for fruits. 47% used moderate amount for milk and milk product. 2-4 liters of milk and milk products like butter milk, curd they are purchasing. Since the villages are working in the agriculture field and, construction work and industrial work they believe that intake of Non vegetarian food is good for health. So they are investing more amounts on Non vegetarian food item like chicken, mutton, egg, and fish. For the children sake they are purchasing biscuit and other snack item for 30 rupees per week and very minimum amount was spend on Hotel food.

Conclusion:
As per our Indian dietary guidelines to meet the required amounts of Vitamins and Minerals consumption of foods and vegetables are important. In this study it is observed the amount spent on foods and vegetables are comparatively less. Hence creating awareness through the government system, introducing home garden concept and social marketing techniques repeated awareness programme and providing information through mass media will be effective to solve the problem.

Effect of Kegel’s Exercise on Postpartum Perineal Fitness: Randomised Controlled Trial
Dr. Neesha Kiran Shinde, Dr. Kunnal Shinde Pravara Institute of Medical Sciences (DU), Loni, Ahmednagar (India)

Keywords: Perineal strength, endurance, Modified Oxford grading score, Kegel’s exercise.
ABSTRACT

Objectives: To Assess the effect of kegels exercise on perineal muscle strength and endurance of postnatal mothers after vaginal delivery.

Methods:
This single blind randomized controlled trial at a tertiary care teaching hospital in Pravara Rural Hospital, Ahmednagar, Maharashtra India. Total 200 postnatal mothers enrolled in the study between 20 and 40 years who had vaginal delivery with < 2 grade for muscle strength on modified Oxford grading scale as measured by per vaginal digital examination. The subjects were randomized into experimental and control groups. The experimental group received instructions to perform Kegel’s exercises along with routine postnatal care while the control group received advice on routine postnatal care. Two follow-up assessments were done at 6 and 12 weeks. The outcome measure was increase in perineal strength and endurance.

Results:
Major findings of the study were: The mean perineal muscle strength assessment scores noted before the intervention and during first and second post intervention assessments were 1.7 ± 0.61 - 3.64 ± 0.31 and 4.45 ± 0.47 respectively for the experimental group and 1.52 ± 0.75 - 2.51 ± 0.62 and 3 ± 0.71 respectively for the control group. Comparison of these scores between the groups by unpaired t-test yielded p-value of < 0.01 suggesting highly significant difference in the experimental group than the control group.

Conclusion:
The Kegel’s exercise is effective to increase the perineal fitness and hence should be included as a part of routine postnatal care.
over 16 percent of the world's population manages with less than 1 percent of the world's total health expenditure. The share of health spending has also not kept pace with the country's dynamic economic growth in the first decade of this millennium (India's total health spending accounted for a much higher 4.8 percent of GDP in 2001–02 and has reduced its share since then). Public spending on health as a share of GDP has varied little over the same decade, hovering at about 1 percent. Government (central, state, and local) is the source of about one-fifth of spending, while out-of-pocket payments represent about 70 percent—one of the highest percentages in the world. Large disparities in health outcomes are still evident between urban and rural areas, across states and amongst social groups, and improvements have not been shared equally. In this light, the presentation discusses the current context of financing of rural healthcare in India, with particular reference to three recent initiatives introduced in the last few years by the central and state governments in India to improve the availability of and access to health services for the rural poor and other vulnerable groups in the country. This includes two federal schemes introduced by the Government of India—the National Rural Health Mission (NRHM) of the Ministry of Health and Family Welfare (MOHFW) and the Rashtriya Swasthya Bima Yojana (RSBY) of the Ministry of Labor and Employment—and state health insurance schemes such as the Rajiv Aarogyaasrisceme launched by the state government of Andhra Pradesh and similar schemes introduced in Karnataka, Tamil Nadu, Kerala, Maharashtra and other states. Provisional estimations from 2005–06 to 2008–09. Among Asian countries, this was exceeded only by Pakistan, Cambodia, Myanmar, and Afghanistan in 2008 (World Health Statistics 2010).

**Surgical Outcomes of Type A Acute Aortic Dissection in Octogenarians in Our Rural Area**
Kazuaki Shiratori, Takahiro Takemura, Yasutoshi Tsuda, Gentaku Hama, and Hirokazu Niitsu, Department of Cardiovascular Surgery, Saku Central Hospital, Japan

**ABSTRACT**

**Objective:**
Because of a rapid increase of the aged population, the numbers of cardiovascular operations for octogenarians are growing in our rural area. In all cardiovascular operations at our hospital, the number for octogenarians occupies over 20% in recent years. We investigated the surgical outcomes of type A acute aortic dissection (AAD) for octogenarians, which is one of the most critical diseases.

**Methods:**
Fifty-two patients underwent aortic dissection repair at our hospital between January 2008 and November 2011. They were retrospectively evaluated. There were 12 patients at the age of 80 or older (Group O, M:F=2:10) and 40 patients under 80 (Group Y, M:F=13:27). The mean age was 81.3±1.5 in Group O (G-O) and 67.1±8.0 in Group Y (G-Y).

**Results:**
In the preoperative state, both groups did not significantly differ except that there were more thrombosed-type dissections in G-O (50%) than in G-Y (15.7%) (p=0.015). In G-Y, 6 patients underwent total arch replacement and 5 patients concomitantly underwent aortic root replacement. Only hemiarch replacement was performed in G-O. G-Y patients demonstrated significantly longer cardiopulmonary bypass time (minutes) (265.6±121 compared with 177.2±42 in G-O, p=0.017) and circulatory arrest time (68.7±34 compared with 47.4±18 in G-O, p=0.014). Postoperative strokes were recognized in 3 G-O patients (18.1%) and 7 G-Y patients (19.4%), with no significant difference. There were 6 in-hospital deaths only in G-Y. There was no statistical difference in the duration of tracheal intubation (4.1 days in G-O, 3.4 days in G-Y), the ICU stay (8.9 days in G-O, 12.5 days in G-Y) and the actuarial survival rate at 3 years (91% in G-O, 73.2% in G-Y).

**Conclusions:**
There was no significant difference in surgical outcomes between the two age groups. However, only hemiarch replacement was performed on the octogenarian patients. It is suggested that in the surgical treatment of acuteaortic dissection on octogenarian patients, good outcomes may well be expected with selecting less invasive operating procedures.

**Knowledge, Awareness And The Impact Of Ergonomic Education Programme To Prevent Musculoskeletal Problems Among Farm Women**
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**Keywords:** Musculoskeletal Problems, Ergonomics, Agriculture, Health Hazard

**ABSTRACT**
The Agricultural Sector Is One Of The Most Hazardous To Health Worldwide (ilo). Women Play A Substantial Role In Farm Related Tasks. Women In Agriculture, Like Many Other Rural Workers, Have A High Incidence Of Injuries And Diseases And Are Insufficiently Reached By Health Services. Women Have Anatomical And Physiological Differences That May Place Them At Risk For Farm Injuries. There Are Numerous Types Of Work-related Musculoskeletal Disorders That Are Reported In Agriculture. These Include Disorders Of The Back And Neck, Nerve Entrapment
Syndromes, Musculoskeletal Disorders Such As Tenosynovitis, Tendinitis, Peritendinitis, Epicondylitis And Nonspecific Muscle And Forearm Tenderness (National Institute For Occupational Safety And Health 1997).

**Aims/objectives:**
The Present Study Was Conducted To Find Out The Knowledge And Awareness Of Musculoskeletal Problems Among Farm Women And To Evaluate The Impact Of Ergonomic Education Programme Conducted To Prevent Musculoskeletal Problems Among Farm Women.

**Material & Methods:**
Cross Sectional Research Design Was Used. Survey Method And Interview Schedule Was Adopted For Data Collection. Purposive Sampling Method Was Used. About 100 Rural Farm Women Residing In Villages Of Kancheepuram, Tamilnadu Were Selected For The Study.

**Results & Discussion:**
The results revealed that the selected farm women were lacking the knowledge and awareness regarding musculoskeletal problems and the ergonomic education programme was found to be quite effective as it reached the participants through self help groups.

**Conclusion:**
Thus, it can be concluded that in order to guarantee sustainable agricultural development in the new millennium, rural women and their families should have access to adequate working and living conditions, health and welfare. An adequate balance between agricultural growth and the protection of the environment is also crucial for the future of the country’s food production and for its sustainability.