RMRCT
UPDATE
Vol. 5, No.1, April 2008
BIANNUAL NEWSLETTER OF
REGIONAL MEDICAL RESEARCH CENTRE FOR TRIBALS
JABALPUR

Editor - in - Chief
Dr. Neeru Singh
Director

Editor
Dr. Kalyan B. Saha
Scientist C

Assistant Editors
Dr. Jyothi T. Bhat
Scientist B

Dr. Ravendra K. Sharma
Scientist B

Photography
Dr. Rakesh C. Mishra
Sr. Artist-cum-Photographer

Inside

Article
Tobacco use among Gonds of Kundam, Jabalpur : Some preliminary findings
Publications
Conference/Workshop/ Meeting attended
Foreign visits
Workshops/Training/Meeting conducted
Infrastructure Development
Events
Joining
SAC Meeting
National Science Day
Foundation Day

TOBACCO USE AMONG GONDS OF KUNDAM, JABALPUR : SOME PRELIMINARY FINDINGS

Surendra Kumar, Dasarthi Das, Dinesh Kumar

The dried leaf of the plant Nicotiana tobaccum is used for smoking, chewing or snuffing. Tobacco contains more than 4,000 chemicals and most of them are carcinogenic. Tobacco use is responsible for a large number of diseases in human body, such as multiple cancers, particularly lung cancer, heart diseases, strokes, emphysema and many other fatal and non-fatal diseases. Chewing tobacco increases the risk of lip, tongue and mouth cancer. The risk of lung cancer in non-smokers exposed to passive smoking increase by 20% - 30%, and excess risk of heart disease by 23%. Children are at particular risk from adult smoking. Scientific evidences have shown conclusively that all form of tobacco use cause health problems throughout life, frequently resulting in deaths and disabilities.

Women who smoke bear the brunt of additional health risk, particularly during pregnancy which is not only dangerous to the mother but also to the foetus. Maternal smoking is not only harmful during pregnancy, but has long-term effects on the baby even after birth[1]. Thousands of studies all over the world had shown that tobacco use in all forms kill its user and in particular smoking cigarette kills even non-users. However, people continue to smoke and deaths from tobacco use continue to increase. The use of tobacco kills millions of people every year and ruins the health of millions more[2]. Tobacco kills more than AIDS, legal drugs, illegal drugs, road accidents, murders and suicides[1]. The single most preventable cause of death and disease in many countries, tobacco product kill nearly 5 million people each year[3].

Statements and opinions expressed in the article are solely of author(s)/ contributor(s). The editors disclaim any responsibility for the accuracy of statement made by the author(s)/contributor(s).

Regional Medical Research Centre for Tribals
(Indian Council of Medical Research)
Nagpur Road, Garha
Jabalpur - 482 003
Madhya Pradesh, India
Ph: 0761-2370800/818, Fax: 0761-2672835
Email: rmrctjabalpur@rediffmail.com

At present, about half of the nearly 5 million deaths each year are in developing countries, but by the time the annual death toll doubles to 10 million in 2020, 70% of the deaths will be in developing countries[4,5].

About 1.5% of world's total manufactured cigarettes are consumed in India and about 20% of the total tobacco consumed in the form of cigarettes. Bidis account for about 40% of tobacco consumption, with the rest divided among chewing tobacco, pan masala, snuff, hookah, hookli, chutta, dhumtis and other tobacco mixture. It is estimated that 65% of all men use some form of tobacco, 22% consume smokeless tobacco, 8% both smoke & smokeless. The prevalence of bidi and cigarette smoking among women is about 3%. But the use of smokeless tobacco is similar among women and men. About one-third of women use at least one or other form of tobacco[2]. The Incidence of oral cancer caused by tobacco chewing in India is one of the worlds highest, about one third of all cancer cases. In India it kills 8-10 lakh people each year and many of deaths in very younger age[6]. Tobacco related cancers accounted for about half of all cancers among men and one-fourth among women. Oral cancer accounts for one-third of the total cancer cases with 90% of the patients being tobacco chewers[2]. Though there are many studies which show the higher use of tobacco and its adverse effect in rural areas, but there is lack of studies in tribal areas. Thus the present study proposed to find out the prevalence of tobacco use among Gond- a major tribe of central India.

Methodology

The results discussed in the paper are the outcome of Centre's ongoing project entitled, "**Tobacco related disease in the tribal population of Kundam block Jabalpur,Madhya Pradesh**". The study is being carried out in Kundam block of Jabalpur district, Madhya Pradesh; predominated by Gond tribe. The total population of the block was 107337 as per 2001 census, and Gond tribe comprises about 71.2% of its total population.

The estimated sample size for the study is 1000 households. For the sampling purpose block is divided into four clusters viz. eastern, western, northern and southern cluster. It is proposed to have sample of 250 Gond households from selected villages in each cluster.

Head of the household or senior person are interviewed through structured schedule to collect general household information, and information about household members. Information about tobacco use is collected from all 6 years and/or older individuals available at the time of survey. Detailed history on habit and different type of tobacco use are gathered for all active and passive tobacco users. Schedule also consist of information on knowledge, attitude toward tobacco use, addiction, dependence and quitting behaviors, etc. Clinical examinations of oral cavity are done for all active users by medical doctor.

Formation of village level committee for prevention of Tobacco use

A committee comprising of village Pradhan, school teachers, village health workers, ANM, representative of any NGO operating in the area and one or two educated young persons were formed. The detrimental effects of tobacco use on human health are discussed with committee members and they are trained on the preventive aspects. The committee will continuously counsel the villagers regarding the bad effects of tobacco use.

Results & Field Observations

So far the study is carried out in Six villages in Kundam block of Jabalpur. Total of 1342 population were interviewed from 262 household using pre designed interview schedule. Fifty eight percent of the interviewed persons reported to have used tobacco in one form or the other. The smokeless tobacco products are commonly used by both males and females. Overall about 42% respondents used smokeless tobacco. Women (52.7%) out numbered males (30.6%) in the use of smokeless tobacco. About one fourth males respondents reported that they smoke tobacco, but

Tobacco user status in tribal population of Kundam block, Distt Jabalpur

Sex	Smoker %	Smokeless %	Mixed user %	Non user %
Male (n=670)	25.67	30.59	7.91	35.82
Female (n=672)	--	52.67	--	47.32
Total (n=1342)	12.81	41.65	3.94	41.53

females however, do not prefer smoking. Beedi was the common form of smoking tobacco among them. During clinical examination two lukoplakia cases were found.

Personal observations of researcher from the field also reveal that children below 10 years of age are also using tobacco products in one or other form. Smoking as habit start in the families where there is a smoker and smokeless tobacco user. Use of Bidi, Chillum, Gutaka, Nasmanjan are highly prevalent in the community. Most of them start smoking for pleasure and/or due to socio-cultural customs in this tribe. They also use tobacco to get relief from toothache. There is lack of awareness about harmful effect of tobacco. Some people reported that they tried to quit tobacco but they restarted soon, because they didn't get proper motivation and support.



A tobacco plant within a kitchen garden

The preliminar findings of the study reveals that there is an urgent need to educate the community regarding the possible side effects of beedi smoking and use of other tobacco related products.



A Gond man smoking chillum



Leucoplakia in the mouth of a Gond woman

References

1. Mackay J and Eriksen M. 2002. The Tobacco Atlas. Geneva: World Health Organization.
2. WHO 1997. Tobacco or Health: A global status report. Geneva: World Health Organization.
3. WHO 2002. World Health Report 2002. Geneva: World Health Organization.
4. Murray CJL and Lopez AD. 2002. Assessing the burden of disease that can be attributed to specific risk factor. In World Health Report 2002. Geneva: World Health Organization.
5. WHO 2004. Tobacco Control Legislation: An Introductory Guide. Second Edition. Geneva: World Health Organization.
6. Pandey GD, Raut DK, Hazra S, Vajpayee A, Pandey A, Chatterjee P. 2001. Patterns of Tobacco Use amongst School Teachers. *Indian Journal of Public Health.* 45 (3): 82 -87.

Dr. Surendra Kumar - Scientist C (Community Medicine)
Dr. Dasarthi Das - Scientist C (Immunology)
Mr. Dinesh Kumar - Scientist C (Biostatistics)

Publications

1. Alam MT, Bora H, Bharti PK, Saifi MA, Das MK, Dev V, Kumar A, **Singh N**, Dash AP, Das B, Wajihullah, Sharma YD. 2007. Similar trends of pyrimethamine resistance associated mutations in *P. vivax* and *P. falciparum,* Antimicrobial Agents and Chemotherapy, 51(3):857-863.

2. Anvikar AR, **Rao VG**, Savargaonkar D, Bhondeley MK, Gadge V, Tiwari BK, Ukey M. Seroprevalence of sexually transmitted viruses among tribal population of central India. International Journal of Infectious Diseases (Accepted)

.

3. Das D, Kumar S. 2007. Filarial hydrocele management in global programme on elimination of lymphatic filariasis. Curr. Sci. 93:1200

4. Devotta S, Rayalu S, Wate SR, Labhasetwar N, Biniwale RB, Godfrey S, Labhasetwar P, **Chakma T**, Swami A, Dwivedi HB, Parihar G, Saxena A. 2007. Integrated fluorosis mitigation: A guidance manual. Nagpur: NEERI.

5. Mohamad I. Brooks, **Singh N**, Davidson HH. 2008. Control measures for malaria in pregnancy in India. Ind J Med Res (in press).

6. Sharma RK. Kumar A. 2008. District level analysis of reproductive health status in Madhya Pradesh. In A. Ranjan (eds.), Population Issues. Bhopal: Shyam Institute.

7. Sharma RK, Rani M, Pandey A. 2008. Women status and fertility behaviour in an agricultural society in Uttar Pradesh. Man in India. Vol. 88: no. 1-2.

8. Siddiqui AA, Bora H, **Singh N**, Dash AP, Sharma YD. 2008. Expression, purification and characterization of the immunological response to a 40- kilodalton *Plasmodium vivax* tryptophan-Rich antigen. Infection and Immunity (accepted).

9. Williams EK, Hossain MB, **Sharma RK**, Kumar V, Pandey CM, Baqui AH. Birth interval and risk of stillbirth or neonatal death: findings from rural north India. Journal of Tropical Pediatrics (accepted).

Conference/Workshop/ Meeting attended

Dr. Neeru Singh

Presented papers at 56th Annual meeting of American Society of Tropical Medicine and Hygiene during 4th - 8th November 2007 at Philadelphia, USA.

Presented a paper at 34th Annual Conference of Clinical Biochemistry of India (ACBICON 2007) during 17th - 20th December 2007 at New Delhi.

Chaired a session at National Seminar on Teratology and Genetic Disorders, organized by Centre of Experimental Medicine and Surgery, Institute of Medical Sciences on 7th & 8th February 2008 at Banaras Hindu University, Varanasi.

Delivered a lecture at IX International Symposium on Vectors and Vector Borne Disease organized by NIMR and NVBDCP, Delhi during 14th -17th February 2008 at Puri.

Attended meeting on MIP project review and data analysis workshop during 4th - 8th March 2008 at Boston University School of Public Health, Boston, USA.

Dr. V. G. Rao

Presented a paper at 62nd National Conference on Tuberculosis & Chest Diseases (NATCON 2007) during 14th -16th December 2007 at New Delhi.

Dr. T. Chakma

Delivered lectures in a workshop organized by BAIF institute of Rural Development, Karnataka for the coordinators and workers of Sachetna Drinking water Project on 6th & 7th October 2007 at Tumkur, Karnataka.

Attended International Workshop in Leadership Skills in Nutritional Sciences, organized by Nutrition society of India on13th & 14th November 2007 at NIN, Hyderabad.

Delivered a lecture in workshop organized by UNICEF, Bhopal for Wise Water Management and Fluorosis Mitigation for West Bengal on 28th November 2007 at Indore.

Attended as resource person/observer at the training programme for field investigators and supervisors of Madhya Pradesh for Integrated Disease Surveillance Programme, Cardiovascular Risk Assessment Survey, during 8th - 10th December 2007 at Nagpur.

Delivered lectures at workshop on Integrated Fluorosis Mitigation organized by Ministry of Water Resources, Govt. of Ethiopia, during 2nd- 6th March 2008 at Addis Ababa, Ethiopia.

Dr. R.B. Gupta

Presented a paper at 3rd Indian Anthropological Inter-congress of Indian National Confederation & Academy of Anthropologists on Man and Environment - the South Asian Perspectives during 21st - 23rd February 2008 at Punjab University, Chandigarh.

Dr. S.R. Qamra

Presented a paper at 3rd Indian Anthropological Inter-congress of Indian National Confederation & Academy of Anthropologists on Man and Environment - the South Asian Perspectives during 21st - 23rd February 2008 at Punjab University, Chandigarh.

Presented a paper at National Seminar on Tribal Health in India - Problems and Future Perspectives, organized by the Department of Anthropology, University of Pondicherry, on 4th & 5th February 2008 at Pondicherry.

Mr. Gyanchand

Presented a paper at IX International Symposium on Vectors and Vector Borne Disease organized by NIMR and NVBDCP, Delhi during 14th -17th February 2008 at Puri.

Dr. K.B. Saha

Presented paper at Bhopal Seminar on Contemporary Issues in Population and Health organized by Shayam Institute, Bhopal during 23rd -25th January 2008 at Bhopal.

Presented a paper at National Seminar on Tribal Health in India - Problems and Future Perspectives, organized by the Department of Anthropology, University of Pondicherry, on 4th & 5th February 2008 at Pondicherry.

Dr. D. Das

Attended a meeting on the task force project Epidemiology of Viral Hepatitis in M.P. & Chhatisgarh, on 14th &15th February 2008 at ICMR Headquarter.

Attended a meeting on the task force project Epidemiology of viral hepatitis in M.P. & Chhattisgarh on 18th March 2008 at NIV, Pune.

Dr. Surendra Kumar

Presented a paper at IX International Symposium on Vectors and Vector Borne Disease organized by NIMR and NVBDCP, Delhi during 14th -17th February 2008 at Puri.

Dr. Rajiv Yadav

Presented a paper at 62nd National Conference on Tuberculosis & Chest Diseases (NATCON 2007) during 14th -16th December 2007 at New Delhi.

Dr. Jyothi Bhat

Presented a paper at XXXI National Congress of Indian Association of Medical Microbiologists (IAMM) during 16th - 18th November 2007 at Mangalore.

Presented a paper at 62nd National Conference on Tuberculosis & Chest Diseases (NATCON 2007) during 14th-16th December 2007 at New Delhi.

Presented a paper at Medbio 2008 - An Industry Academia Meet during 14th - 16th February 2008 at BMHRC, Bhopal.

Attended 9th Sir Dorabji Tata Symposium on Antimicrobial Resistance on 10th & 11th March 2008 at SDTC, Bangalore.

Dr. R.K. Sharma

Presented a paper at XIX Annual Conference of Indian Association for the Study of Population (IASP) during 26th - 28th October 2007 at BHU, Varanasi.

Presented a paper at National Seminar on Population, Environment and Development organized by IIPS, Mumbai during 17th -19th March 2008 at Dehradun.

Dr. Jyotirmoy Roy

Presented a paper at National Seminar on Tribal Health in India - Problems and Future Perspectives, organized by the Department of Anthropology, University of Pondicherry on 4th & 5th February 2008 at Pondicherry.

Mr. K.V.K. Rao

Attended a training on OvidSP of NML-ERMED Consortium organized by National Medical Library, Delhi on 5th & 6th February 2008 at New Delhi.

Mr. S.N. Singh

Presented a paper at 3rd All India Conference of CGLA, during 25th - 27th February 2008 at Nagpur.

Foreign visits

Dr. Neeru Singh

Philadelphia, USA during 4th - 8th November 2007.

Boston University School of Public Health, Boston, USA during 4th - 8th March 2008.

Dr. T. Chakma

Addis Ababa, Ethiopia during 2nd - 6th March 2008.

Workshops/Training/Meetings conducted

International Workshop on Molecular Epidemiology and Immunology of Malaria and Other Vector Borne Diseases

An International Scientific Workshop on Molecular Epidemiology and Immunology of Malaria and Other Vector Borne Diseases was organized at Regional Medical Research Centre for Tribals jointly with National Institute of Malaria Research, Field Station, Jabalpur during 16th - 19th October 2007. Various health needs and problems on genomics, host parasite interactions, genetic diversity, pathogenesis, epidemiology and control were discussed. Hands on training sessions were arranged for participants on PCR and Sequencing. National and international scientists and eminent laureates of various fields addressed the workshop.



Malariology Training Workshop

Two Malariology training workshop for Medical Officers of districts of Madhya Pradesh were organized during 28th - 30th January 2008 and 25th -27th February 2008. The workshops were organized jointly with NIMR - FS Jabalpur and Directorate of Health Services, Bhopal under Enhanced Vector Borne Disease Control Programme (EVBDCP).



Infrastructure Development

Nitrogen plant

A liquid nitrogen plant of capacity 200 litres was recently installed at the centre. This would provide uninterrupted supply of liquid nitrogen for cryopreservation of biological specimens for longer duration.



Library

Central Library of the centre has acquired a 48 bodies compacter to accommodate books and Journals.



Events

Joining

Dr. Neeru Singh, Scientist 'G' took over the charge of the centre as Director on 1st October 2007.



SAC Meeting

Meeting of Scientific Advisory Committee of the centre was held on 29th December 2007. Ongoing, completed and proposed new projects were discussed.



National Science Day

National Science Day was celebrated on 28th February. On this occasion scientific posters were exhibited. Centre's scientists and technical staff delivered lectures on emerging health problems at various schools of Jabalpur city. Students from different schools also visited the laboratories and interacted with scientists and othe researchers of the centre.



Foundation Day

The centre celebrated its 24th foundation day on 1st March. On this occasion Dr. Altaf Lal, Health Attache, US Embassy, delivered foundation day lecture and Sri M. Rajamani, IAS, Sr. Dy. Director General (Admn.) and Sri Sanjiv Datta, Financial Advisor, ICMR, New Delhi also graced the occasion. Prizes were distributed to the best workers from technical and administrative categories.

