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CONTENTS

1. Editorial - World Health Day 2008 : Protecting Health from Climate Change	1
<i>S. C. Saxena</i>	
2. Awareness regarding link between HIV/AIDS and STDs.	5
<i>Pradeep Agarwal, Surekha Kishore, Pratime Gupta</i>	
3. Maternal care services utilization in urban slums of district Agra : Population based study	12
<i>Sadhana Awasthi, Deoki Nandan, A. K. Mehrotra, Punit Varma</i>	
4. An epidemiological study on child neglect and its effect on Psycho-social development of girl child in rural areas of Lucknow district	18
<i>Bharat Dubay, O. P. Singh, R. Kumari, S. P. Patel, J. V. Singh, U. Mohan, A. K. Srivastava</i>	
5. Treatment seeking behaviour among the cases of eye disease in the rural areas of Allahabad district	24
<i>Arun Singh, D. Sharma, S. Dwivedi, J. P. Srivastava</i>	
6. An epidemiological and clinico-pathological profile of oro-mucosal diseases amongst substance abusers in Kanpur Nagar	29
<i>R. K. Singh, Sandeep Sahu, Awnish Kumar, G. D. Yadav, D. S. Martolia, Avijit Kumar</i>	
7. Role of anesthesiologist in reducing Maternal Mortality rate in India	34
<i>Sandeep Sahu, Indu Lata, R. P. Sharma, Suresh Chandra, D. S. Martolia, S. Nigam, Vijai Kumar Chaudhary</i>	
8. Health awareness profile of late adolescents (16-19 years) of a rural area of Kanpur	38
<i>Santosh Kumar Verma, R. P. Sharma, Suresh Chandra, D. S. Martolia, Punit Varma</i>	
9. Study of morbidity pattern in geriatric population and correlation of housing conditions with relevant morbidities in a rural area of Kanpur	43
<i>S. Goel, V. K. Srivastava, Seema Nigam, S. C. Saxena, Punit Varma, R. P. Sharma</i>	
10. Assessment of awareness level regarding Rabies amongst school students in Kanpur Nagar	47
<i>D. S. Martolia, V. K. Chaudhary, Pooja Goel, Suresh Chandra, Santosh Kumar Verma, Praveen Katiyar</i>	
11. Bio-social characteristics of new entrants of G.S.V.M. Medical College, Kanpur	50
<i>S. C. Saxena, S. K. Kaushal, J. P. Srivastava</i>	

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EDITORIAL

WORLD HEALTH DAY 2008 : PROTECTING HEALTH FROM CLIMATE CHANGE

World Health Day on 7th April, marks the founding of the World Health Organization and is an opportunity to draw world wide attention to a subject of major importance to global health each year. In 2008, World Health Day focuses on the need to protect health from the adverse effects of climate change.

The theme "Protecting health from climate change" puts health at the centre of the global dialogue about climate change. WHO selected the theme in recognition that climate change is posing ever growing threats to global public health security.

- Strengthening surveillance and control of infections.
- Ensuring safer use of diminishing water supplies and coordinating health action in emergencies.

Aims and Objective of World Health Day 2008 :

This is an opportunity for the International agencies, NGOs and Government as well as WHO to :-

- Establish links between climate change and health and other development areas such as environment, food, energy and transport.
- Hold events/activities in countries to publicize issues related to the impact of climate change on health.
- Involve as wide a spectrum of the world population as possible in efforts to stabilize climate change.

Great advocacy campaigns for

generating momentum that compels government, the international community, civil society and individuals to take action.

Protect poor and vulnerable population from the effect of climate change, especially in Africa.

Goals for World Health Day 2008 :

- Raise awareness and public understanding of the global and locally relevant health consequences of climate change.
- Advocate for inter disciplinary and intersectoral partnerships from the local to international level through development of proactive adaptation programmes to minimize health impacts.
- Generate effective actions by local communities, organization, health system and governments to reduce the impact of climate change on health through urgent application of mitigation and adaptation techniques.
- Demonstrate the health community's role in phasing the challenges globally and in regions, countries and communities.
- Spark commitment and action among government, international organization donors, civil society, business and communities especially among young people to anchor health at the heart of climate change agenda.

Climate Change : an issue for the health sector

Health hazards from climate change are

diverse and global in nature. The hazards range from higher risks of extreme weather events to change in the dynamics of infectious diseases, many of the leading killer diseases are sensitive to climate conditions, their incidence and spread are likely to be affected by changing weather patterns.

The health impacts of climate change are already evident in different ways.

More people are dying from excessive heat than before, changes are occurring in the incidence of vector-borne diseases and the pattern of natural disasters is altering. These impacts will be disproportionately greater in vulnerable populations, which include the very young, elderly, medically infirm, poor and isolated population.

Vulnerability is also High in:

- Area with a high endemicity of climate sensitive diseases, severe water scarcity and low food production.
- Small island developing states and mountainous regions.
- Mega cities and coastal areas in developing countries.

Actions needed to be taken now:

The health impacts of climate changes will be difficult to reverse in a few years or decades. Yet many of these possible impacts can be avoided or controlled. There are established steps in health and related sectors to reduce the exposure to and the effect of changing climate. For example, controlling disease vectors, reducing pollution from transport and efficient land use and water management are well known and tested measures that can help. Moreover, many of the steps needed to prevent climate change have positive health benefits for example increased use of bicycles and public transport instead of personal cars in

industrialized countries will reduce greenhouse gas emissions. It will also improve air quality and lead to better respiratory health and fewer premature deaths. The increase in physical activity from cycling and walking will lead to less obesity and fewer obesity-related illnesses. The sooner these steps are taken, the greater their impact will be on public health.

Global Warming:

Most of the warming in last 50 Years → human activity → altered chemical composition of atmosphere → greenhouse gases → heat trapping → global warming.

Our Changing Atmosphere:

Energy from sun → heats the earth surface → radiates back into the space → Trapping of energy → by greenhouse gases → retention of heat temp 60°F.

Problem arises when atmospheric concentration of greenhouse gases increases.

Green House Gases:

CO₂- Burning of solid waste
Fossil fuel (oil, natural gas, Coal).

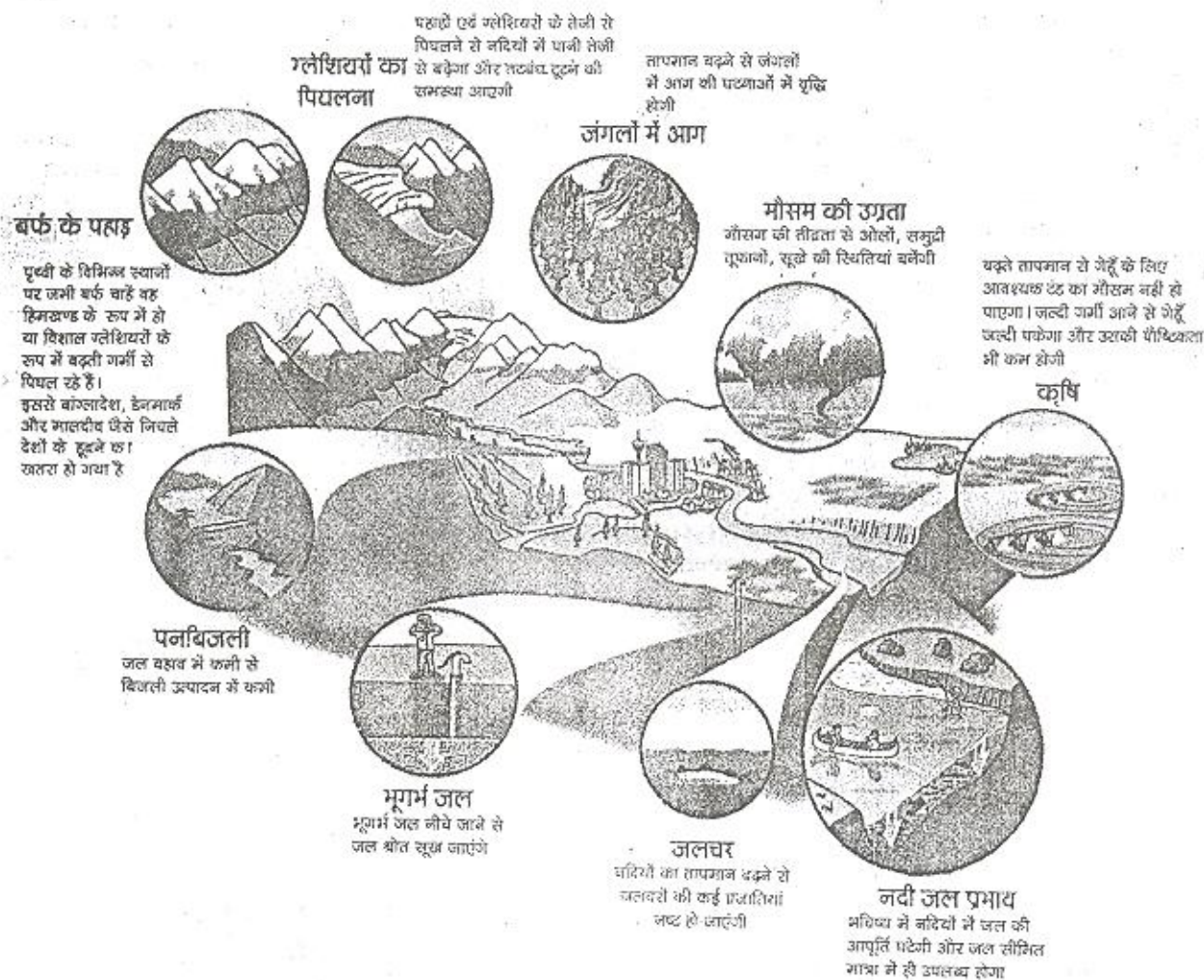
CH₄- Production and transport of coal, natural gas and oil, decomposition of organic waste in municipal solid waste landfills.

NO₂- During agricultural activities and combustion of solid waste and fossil fuel.

Why Green House Gases Concentration Increasing?

- Human activities - Fossil fuels burned to run cars, trucks, heat homes and market and power factories.
- Increased agriculture.
- Deforestation.
- Landfills.
- Industrial Production.
- Mining.

ग्लोबल वार्मिंग के दुष्परिणाम



Dr. S. C. Saxena

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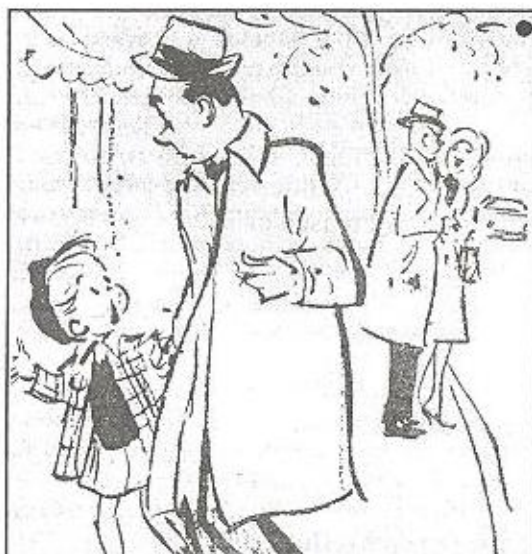
ACKNOWLEDGMENT

We are thankful to all of you to entrust us in General body meeting of IAPSM (UP Chapter) on 30th Nov. 2007 at R.I.M.S.R. Safai (Etawah) to continue the publication of Indian Journal of Community Health from Deptt. of Community Medicine, G.S.V.M. Medical College, Kanpur, in the presence of Dr. Deoki Nandan (NIHFW, New Delhi), Dr. V. K. Srivastava (President), Dr. Udai Mohan (Secretary), Dr. C.M. Singh (Organising Secretary), Dr. M. Dabral (Jhansi), Dr. S.K. Garg (Meerut), Dr. C.P. Misra (BHU, Varanasi), Dr. N. Khalique (AMU, Aligarh) and other faculty members of Community Medicine of different Institutions.

The faculty members of Department of Community Medicine, G.S.V.M. Medical College, Kanpur present in the Meeting - Dr. S.C. Saxena, Dr. R.P. Sharma, Dr. Suresh Chandra, Dr. D.S. Martolia and Dr. Vijai Kumar Chaudhary collectively have assured the House to fulfil their commitment for regular publication & distribution of Indian Journal of Community Health.

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CHILDHOOD QUERIES



"Dad, you're always correcting my grammar. But when we met them, you said 'Hi, folks-long time no see!'"

George Clark. "The Neighbors." Chicago Tribune-New York News Syndicate, May 6, 1967. Used by permission.



"They're for people who don't have TV."

George Clark. "The Neighbors." Chicago Tribune-New York News Syndicate, Nov. 6, 1971. Used by permission.



AWARENESS REGARDING LINK BETWEEN HIV/AIDS AND STDs.

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ABSTRACT:

Research question : To determine the awareness regarding link between HIV/AIDS and STDs among a rural population.

Objectives :

To assess the level of awareness regarding link between HIV/AIDS and STDs among rural population.

Study Design : Cross Sectional study.

Settings : In the field practice area under Deptt of Community Medicine, Doiwala block of Distt Dehradun.

Participants : 960 individuals between the age of 15-49 yrs.

Statistical Analysis : Chi Square and proportions

Result : Overall awareness for AIDS is 92.5%, 85.1% knew sexual route as mode of transmission with only 51% had knowledge about linkage.

Key words : HIV/AIDS; Sexually Transmitted Diseases (STD)

Introduction :

HIV/AIDS is spreading from urban to rural areas and from high risk behavior groups to general population since 1990². Testing and treatment of sexually transmitted diseases (STDs) can be an effective tool in preventing the spread of HIV, the virus that causes AIDS. An understanding of the relationship between STDs and HIV infection can help in the development of effective HIV prevention programs for persons with high-risk sexual behaviours. Individuals who are infected with STDs are at least two to five times more likely than uninfected individuals to acquire HIV infection if they are exposed to the virus through sexual contact. In addition, if an HIV-infected individual is also infected with another STD, that person is more likely to transmit HIV through sexual contact than other HIV-infected

persons¹.

An estimated five percent adult population affected by STDs, also has HIV infection. HIV vulnerability from STDs is furthermore increased as access to treatment of medical care for these diseases is very low, especially among the high risk groups³.

The study is an attempt to highlight lacunae in the knowledge of rural population with respect to cause, effects, modes of transmission and methods of prevention of HIV/AIDS and STDs.

Material and Methods :

The study design was cross sectional and carried out over a period of six months in the field practice areas of Rural Health Training Centre, Department of Community Medicine,

Himalayan Institute of Medical Sciences - Doiwala block of District Dehradun. The block comprises of 76 villages with a total population of 1,58,313 individuals. 30 cluster sampling technique⁴ was used to have equal representation from the population. Each cluster was again divided into four sectors, from each sector 8 persons in the age group 15-49 years i.e. 4 Male & 4 Females (from different households) were interviewed, to collect the relevant information and thus from each cluster 32 persons were studied and a total of 960 persons were included in study. Individual information

regarding awareness for HIV/AIDS and STDs was collected on a predesigned and pretetested questionnaire after taking informed consent maintaining confidentiality. The questionnaire consisted of questions viz. Have you heard about AIDS excluding HIV and STD; mode of transmission of AIDS; Linkage between AIDS and STDs; whether AIDS is a STD, etc.

Result :

The present study was conducted in a rural community of Dehradun district. The information about the biosocial characteristics of the respondents is as follows:

Table 1
RESPONDENTS BY SEX & AGE

Sex	Male		Female		Total	
	(n=480)		(n=480)		(n=960)	
Age (yrs)	No	%	No	%	No	%
15-19	101	21	57	11.9	158	16.5
20-24	103	21.5	98	20.4	201	20.9
25-29	97	20.2	107	22.2	204	21.2
30-34	60	12.5	68	14.3	128	13.4
35-39	44	9.2	76	15.8	120	12.5
40-44	40	8.3	36	7.5	76	7.9
45-49	35	7.3	38	7.9	73	7.6
Total	480	100	480	100	960	100

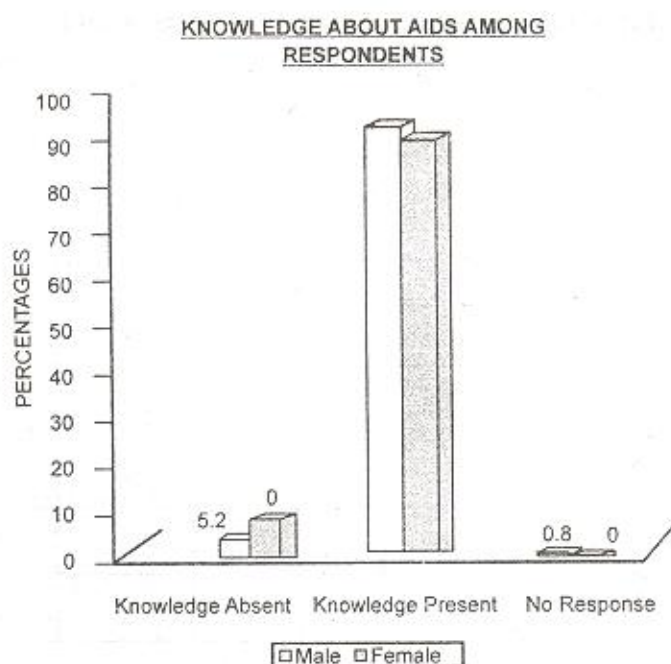
Table 1 depicts that the total respondents, the majority belonged to 25-29 years of age group 21.2 percent. Median age of the respondents was found to be 25.4 years. Most of the male respondents i.e. 21.5 percent belonged to 20-24 years age whereas the majority of the females 22.2 percent were found to be in the age group of 25.29 years.

Table 2
HAVE YOU HEARD ABOUT AIDS

Sex	Male		Female		Total	
	(n=480)		(n=480)		(n=960)	
	No	%	No	%	No	%
Knowledge Absent	25	5.2	43	9	68	7.1
Knowledge Present	451	94	437	91	888	92.5
Don't know	4	0.8	0	0	4	0.4
Total	480	100	480	100	960	100

$$(\chi^2=4.97, df=01, p<0.05)$$

Table 2 shows that, awareness of AIDS was 92.5 percent and only 7.5 percent of respondents were not aware of AIDS (figure 1) this difference in knowledge about AIDS was statically significant. ($p<0.05$).



Majority 66.2 percent of respondents told that their source of information regarding knowledge about STDs was through TV/ Radio followed by Books (24.9 percent), News paper (20.7 percent), Doctor (10.9 percent) and Health workers (5.5 percent) that were least.

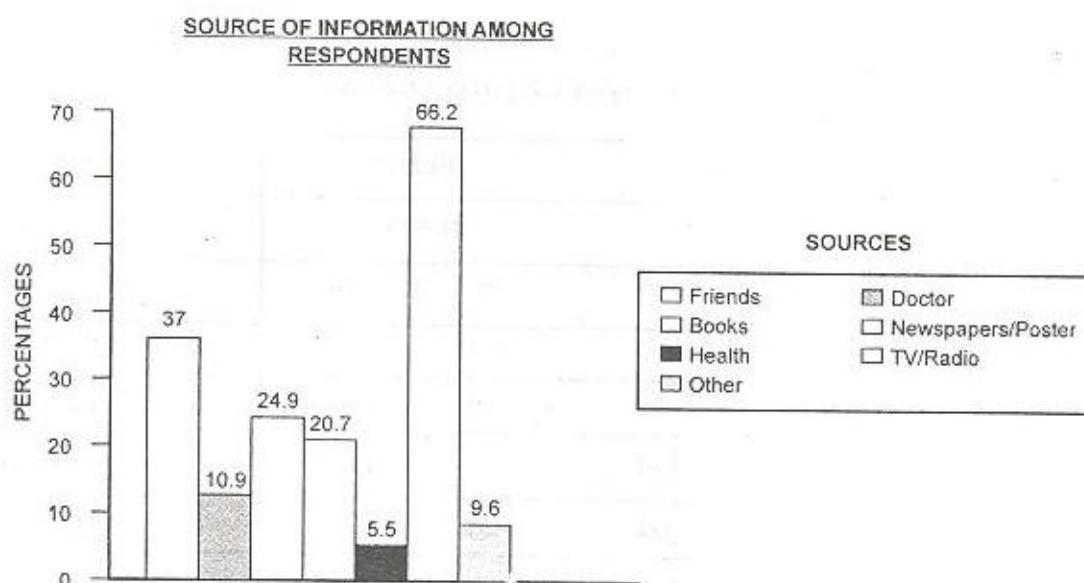


Table 3
KNOWLEDGE OF MODE OF TRANSMISSION OF AIDS AMONG RESPONDENTS

Sex	Male		Female		Total	
Mode of transmission	(n=480)		(n=480)		(n=960)	
Knowledge Present	No	%	No	%	No	%
Sexual route	414	86.3	403	84	817	85.1
Blood borne	261	54.4	346	72.1	607	63.2
Infected needle	278	57.9	362	75.4	640	66.7
Mother to child	144	30	197	41	341	35.5
Don't Know	49	10	47	9.8	96	10

Table 3 shows, majority (85.1 percent) of the respondents had the knowledge that sexual route is a mode of transmission of AIDS, followed by infected needles 66.7 percent, blood borne (63.2 percent) and the least was mother to child (35.5 percent) (Figure 2).

**KNOWLEDGE REGARDING MODS OF
TRANSMISSION FOR AIDS AMONG
RESPONDENTS**

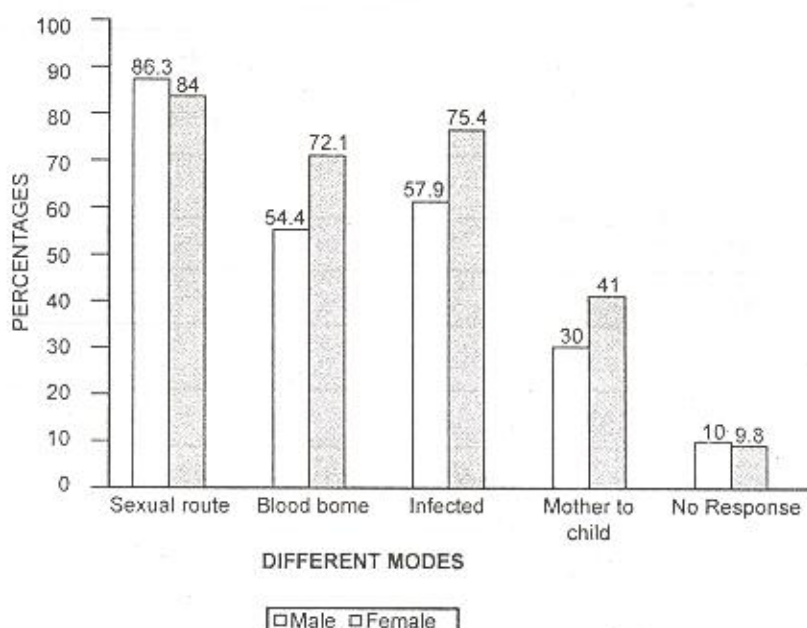


Table 4
**KNOWLEDGE ABOUT LINKAGE BETWEEN AIDS AND STDs AMONG
RESPONDENTS**

Sex	Male		Female		Total	
	(n=480)		(n=480)		(n=960)	
Linkage	No	%	No	%	No	%
Knowledge Absent	48	10	21	4.4	69	7.2
Knowledge Present	212	44.2	278	57.9	490	51
Don't know	220	45.8	181	37.7	401	41.8
Total	480	100	480	100	960	100

$(\chi^2=16.82, df=01, p<0.05)$

Table 4 shows that, approximately half 51 percent of the respondents had the knowledge about linkage between AIDS and STDs that was statistically significant ($p<0.05$).

Table 5
DO YOU THINK THAT AIDS IS STDs

Sex	Male		Female		Total	
	(n=480)		(n=480)		(n=960)	
	No	%	No	%	No	%
Knowledge Absent	47	9.8	33	6.9	80	8.3
Knowledge Present	303	63.1	324	67.5	627	65.3
Don't know	130	27.1	123	25.6	253	26.4
Total	480	100	480	100	960	100

($\chi^2=3.08$, df=01, $p<0.05$)

Table 5 shows that, majority (65.3 percent) of respondents think that AIDS is a STD and 34.7 percent doesn't think that AIDS is a STD. Females (67.5 percent) were more aware as compared to males (63.1 percent), that AIDS is a STD with $p<0.05$.

Discussion :

In the present study, out of 960 respondents surveyed, 47.1 percent belonged to the age group of 25-39 years with median age of respondents of 25.4 years. Similar age group 25.39 years contributed nearly 50 percent of the total respondents among the rural areas surveyed under the National Baseline BSS of NACO with the median age of respondents ranging from 28 to 30 years⁵. In another study 49.1 percent of the general population of urban slum at Lucknow, belonged to 25-35 years of age group⁶. A total of 42 percent of the study subject, were also reported in the same age group in a study conducted in South India⁷.

In this study 66.2 percent of respondents had knowledge about STDs from massmedia, such as Television & Radio followed by other means of information such as newspaper/

posters, friends, etc. Source of information : Television (79.4 percent) and Radio (24.5 percent) were reported in DLHS, RCH-II of Dehradun district⁸.

According to national Family Health Survey III (2005-2006) it was reported that the national figure of rural population that have heard about AIDS is 63.5%, while the percentage is more in males (77%) as compared to females (50%). In the year 2001, under the National AIDS Control Project-II National Baseline BSS was conducted among the general population, that shows, only 45.4 percent of the respondents had knowledge about HIV/AIDS in rural areas of Uttar Pradesh (Uttaranchal being part of it)⁵. Under DLHS-2002, RCH-II of Dehradun district of Uttaranchal, it was reported that rural males (63.1 percent) and females (36.1 percent) had responded to HIV/AIDS positively⁸. In a study among rural women in a South Indian

Community the awareness on HIV/AIDS was found to be 70 percent⁹. Knowledge about HIV/AIDS in tribal population of Rajasthan was reported to be 57.7 percent¹⁰. In National Baseline general population BSS-2001 of Delhi State it was reported that 88.2 percent had ever heard of HIV/AIDS⁵.

The state of NFHS III reveals that overall percentage of knowledge about AIDS ranges from 90 to 100% and 60 to 80% among males & females respectively¹¹. NACO baseline BSS 2001, showed the respondent's knowledge about the mode of transmission as follows: Sexual contact (39.8 percent), HIV+ve blood (42.7 percent), Infected needles (41.3 percent), Vertical Transmission (36.9 percent)⁵.

A very limited community based studies have been carried out on the awareness regarding linkage between HIV and STDs, to mention awareness 23.9 percent have been reported in National Baseline BSS for Delhi by NACO⁵. About 80% of the NGOs rightly pointed out the association between STDs and HIV/AIDS¹².

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MATERNAL CARE SERVICES UTILIZATION IN URBAN SLUMS OF DISTRICT AGRA : POPULATION BASED STUDY

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Abstract:

Background: Despite continuous efforts by government functionaries the utilization and awareness regarding maternal care is still poor in India.

Objective: To know the extent of maternal care services utilization.

Study Design: Cross-sectional community based.

Setting: Urban slums of district Agra.

Participants: Married women aged 15-49 years, who have delivered a child during last one year interviewed at home.

Statistical Analysis: Software like Systat-12 for analysis and tests of significance like chi-square test were utilized.

Results: Only 16.1% of women had 3 or more ANC visits and only 3.6% had their first visit during first trimester. The antenatal check-ups influenced with the educational level of mothers ($p < 0.001$). A majority of women (55.8%) did not receive any postnatal checkup after their most recent birth.

Keywords: Maternal care, Antenatal care, Male involvement, Safe motherhood, Millennium Development Goals.

Introduction:

In 2007, the Safe Motherhood Initiative is celebrating its 20th anniversary. Although the decline is impressive but still a lot can be done to achieve the time bound target of 100 maternal deaths per lakh of life births by 2012¹. Most of the maternal deaths can be prevented if women have access to basic medical care during pregnancy, childbirth and postpartum period². In India, these services are provided through the network of health centers in out-patient clinics, as well as through home visits by health

workers³. However utilization of these services by the target population continues to be poor⁴. The present study was done to know the level of utilization of maternal care services in urban slums in Agra.

Material and Methods:

Present study was conducted in Agra, a district of U.P. state, India, during 2003-2004, a city of Taj Mahal, which was made by Emperor Shajahan in memory of his wife Mumtaz Mahal, who died during childbirth. In randomly

selected urban slums, those households were listed in which females had delivered babies with in the past one-year.

On the basis of Rapid Household Survey-RCH Project Phase-II, 1999, Antenatal coverage of Agra urban was taken as indicator for calculating the sample size. Taking 95% confidence limit with 10% precision and 20% non response rate, a sample of 360 women were interviewed on a pre-tested structured schedule for eliciting the study information. Non response rate was zero. A pilot study was carried out and necessary modifications were done in schedule before starting the study.

The information collected and analyzed with the help of Systat-12 software. The study

was conducted in the selected slums of district Agra; hence the results cannot be generalized for the entire state/ country.

Results :

Profile of Respondents :

The mean age of females in the study group was 30.10 years (± 5.65). Majority of women (69.70%) were in the age grouped 20 to 29 years. Literacy status revealed 41.3% illiterate and only 12.8% were having a schooling of 10 years or more. More than half (58.89%) of the respondents belonged to nuclear families. Majority of women (88.37%) were housewives. All the families were found to be in the lower socio-economic class.

Maternal Care :

Table-1

UTILIZATION OF MATERNAL HEALTH SERVICES* BY THE STUDY POPULATION

Period	Utilized	Not Utilized	Total
Antenatal	234(65%)	126(35.01%)	360
Natal	264(73.33%)	96(26.66%)	360
Postnatal	159(44.16%)	201(55.83%)	360

* A women who had received at minimum one antenatal visit, had her delivery conducted by a trained personnel and at least one postnatal visit said to have utilized maternal health service.

Table-1 stated the maternal care utilization by the women. Antenatal care was received by 65% of women. Only 44.4% of

women received postnatal care, in spite of 73.3% of delivery conducted by a trained health staff.

Table-2
DEMOGRAPHIC CHARACTERISTICS OF THE WOMEN IN RELATION TO NUMBER OF ANTENATAL CARE

Characteristics	No Antenatal Visit N(%)	Number of Antenatal Visits		Total N(%)	P value
	1-2 visits N (%)	Three Visits N(%)			
Religion					P <0.05
Hindu	90(71.4)	148(84.1)	54(93.1)	292(81.1)	
Muslim	36(28.6)	28(15.9)	4(6.9)	68(18.9)	
Education					P <0.001
Illiterate	86(68.3)	49(27.8)	14(24.1)	149(41.4)	
<10	35(27.8)	103(58.5)	28(48.3)	166(46.1)	
10 or 10+	5(3.9)	24(3.6)	16(27.6)	45(12.5)	
Age group (Years)					P >0.05
15-19	5(3.9)	3(1.7)	2(3.5)	10(2.8)	
20-39	117(92.9)	171(97.2)	56(96.6)	344(95.6)	
40-49	4(3.2)	2(1.1)	0(0)	6(1.7)	
Total	126(35.0)	176(48.9)	58(16.1)	360(100)	

Number and Timing of Antenatal Care Visits:

The number of antenatal care visits and the timing of the first visit are important for the health of the mother and the outcome of the pregnancy. The World Health Organization recommends that all pregnant women should have at least four antenatal care (ANC)

assessments by or under the supervision of a skilled attendant (W.H.O., 2006)⁵. These assessments should be spaced at regular intervals throughout pregnancy, commencing as early as possible in the first trimester. Table-2 reveals that only 16.1% of women had 3 or more antenatal visits. The antenatal visits were substantially influenced ($p < 0.001$) by level of education.

Table-3

DEMOGRAPHIC CHARACTERISTICS OF THE WOMEN IN RELATION TO TIMING OF FIRST ANTENATAL VISIT

Characteristics	No Antenatal Visit	Timing of First Antenatal visit.			Total N(%)	P value
		1st Trimester	2nd Trimester	3rd Trimester		
Religion						P <0.05
Hindu	90(71.4)	10(76.9)	95(82.6)	97(91.5)	292(81.1)	
Muslim	36(28.6)	3(23.1)	20(17.4)	9(8.5)	68(18.9)	
Education						P <0.001
Illiterate	86(68.3)	1(7.7)	35(30.4)	28(26.4)	149(41.4)	
<10	35(27.8)	3(23.1)	62(53.9)	66(62.3)	166(46.1)	
10 or 10+	5(3.9)	9(69.2)	25(21.7)	6(5.7)	45(12.5)	
Age group (Years)						P >0.05
15-19	5(3.9)	1(7.7)	3(2.6)	1(0.9)	10(2.8)	
20-39	117(92.9)	12(92.3)	111(96.5)	104(98.1)	344(95.6)	
40-49	4(3.2)	0(0)	1(0.9)	1(0.9)	6(1.7)	
Total	126(35.0)	13(3.6)	115(31.9)	106(29.4)	360(100)	

Regarding timing of first antenatal visit (Table-3), most (31.9%) of women had their first ANC visit in the second trimester.

Male Involvement in Antenatal Care:

Table-4 presents information on men's involvement during maternal care. It was observed that only 18.33% of husbands were present during antenatal checkup. When asked about the reasons for not accompanying during

ANC, majority of them (72.45%) told that they didn't have time to go with them. 24.15% of them did not feel any need to go with them and 3.40% told that old family member did not permit them to go. From table-3 it is also clear that 32.5% of men did provide help in house hold work during pregnancy, while most of women (67.5%) did not get any help in house works from husband.

Table-4
INVOLVEMENT OF HUSBAND IN MATERNAL CARE

Type of activity	Response No = 360		Reasons for not involving in maternal care	Did't feel need %	Lack of time %	Denial of permission %	Total N
	Yes %	No %					
Accompany her to antenatal visits	18.3	81.7		24.2	72.5	3.4	294
Helping her in house hold work	32.5	67.5		23.6	41.7	2.2	243
Be with her in decisions regarding delivery	28.3	71.4		56.42	26.1	17.5	257
Be with her during delivery	87.5	12.5		11.11	88.89	-	45

Discussion :

Similarly, NFHS-3, India showed 25% of mothers had 1-2 antenatal care visits and 52% had three or more visits. 44% of mothers had their first antenatal care visits in the first trimester of pregnancy and another 22% had their first visit during their 4th or 5th month of pregnancy. Only 10% women had their first antenatal care when they were six or more months pregnant. Older women (age 35-49) are much less likely than younger women to have received antenatal care for their most recent birth, 98% of women with 12 or more years of education received antenatal care, compared with 62% of women with no education. For 50 percent of the pregnancies, the father said he was present during at least one of the mother's check-ups. For 17 percent of pregnancies, the mother had at least one antenatal check-up but

the father was not present during any of the check-up⁶. NFHS-3 results for Uttar Pradesh also reported that mothers received at least one antenatal check-up for only 66%, 26.6% of women, who had received 3 or more ANC visits, and only 25.7% with an ANC visit in first trimester of pregnancy. So antenatal care utilization in India varies greatly by state. 14.9% of mothers received postnatal care in U.P., reported by NFHS-3⁷.

Similar findings reported in RHS-Agra slums that only 21.7% of women had 3 ANC visits, and only 10.4% had first visit in the first trimester⁸.

Conclusion and Recommendations :

There should be a deliberate attempt at each and every level to understand the specific needs of the area to be intervened and a policy

decision and programme planning to achieve excellence in public health. This is the right time to fill the gap between rhetoric and reality to achieve Millennium Developmental Goals.

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AN EPIDEMIOLOGICAL STUDY ON CHILD NEGLECT AND ITS EFFECT ON PSYCHO-SOCIAL DEVELOPMENT OF GIRL CHILD IN RURAL AREAS OF LUCKNOW DISTRICT

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Abstract:

Research Question: What are the various areas of girl child neglect and how it affects the psycho-social development of girl child.

Objectives:

1. To study the various aspects of girl child neglect.
2. To study the effect of various socio-demographic correlates of psycho-social development of girl child.

Study Design: Cross Sectional.

Study Unit: Girl child (0-<72 month).

Study Area: Rural field practice area of Department of Community Medicine, King George's Medical University, Lucknow.

Study Variables: Independent :- Socio-demographic, environmental factors (e.g.-birth order, education, sanitation etc.), physical and psychological component of neglect. Dependent :- Socio-developmental quotient.

Statistical Analysis: chi square test logistic regression.

Result: Out of the 400 subjects studied, Sub-normal socio-developmental quotient ($SDQ < 90$) was found in 8.2% girl child. Birth order, access to improved water source, type of cooking fuel and neglect in cloths allocation, initiation of schooling, need of care and protection and domestic violence against girl in comparison to oys were found to be significantly associated with sub-normal socio-development. Out of these birth order, access to improved water source, initiation of schooling, need of care and protection were found independent predictor of sub-normal socio-development.

Key Words: Girl child, VSMS, Socio-development Quotient.

Introduction:

The girl child of today is the woman of tomorrow. Girl children (0-72 months) in rural areas constitute three-fourth of the pool of 78.8 millions (7.6% of total population), 46% of these girl children are underweight (below 2SD), (DLHS, 2002)¹. Independent studies have suggested that neglect in food, clothing, affection vis-à-vis boys has adverse affect on normal psychological development of girl child.

According to Census², the juvenile sex

ratio (0-6 age group), had fallen sharply from 962 (1981) to 927 (2001) (corresponding figure for UP was 898), while sex ratio at birth has improved from 927 (1991) to 933 (2001). The adverse juvenile female to male ratio is indirect reflection of the biased and negligent attitude of the community towards the girl child which is prevalent in several parts of the country⁴.

Objective:

To study the various aspects of girl child neglect and how various socio-demographic,

environmental and various components of neglect affect the psycho-socio development of girl child.

Material and Method :

The study was conducted during August 2005 to September 2006 in Experimental Teaching Health Sub Center (ETHSC) Banthara and Mati Covering 11 Villages and Hindu Kheda, an adopted village for mobile health services. A sample of 400 was studied, based on prevalence (p) of 46% for underweight (wt<-2SD) among girl-child (0-<72 months) with absolute permissible error of 5% at 95% confidence limit. Additional 10% subjects were taken extra to account for non response. Requisite sample size was reached by first deciding the number of household to be taken for the survey in Banthara, Mati and Hindu Kheda according to Population Proportion to Size (PPS) and then Simple Random technique was used to select the household to be included in the survey. Hindi version of Vineland Social

Maturity of Scale (VSMS, Nagpur adaptation by Malin, 1968), was used to calculate socio-developmental age and a socio-developmental quotient of girl child which was taken as an indicator of psycho-social development of girl child.

Observation and Discussion

The study had shown that subnormal Socio-developmental Quotient (<90) was present in 33 (8.2%) out of total 400 girl child. Birth order of the girl-child had shown significant association with subnormal Socio-development, while religion, caste, family size, educational level or socioeconomic status of parent was not statistically significant. R. Pande et al⁵ (2005) showed that whether parents discriminate against a daughter depends on the sex of her older siblings, if a family already has a daughter, they are likely to neglect a second. Girls with two or more older sisters are the most neglected :

Table-1

ASSOCIATION OF SOCIO-DEVELOPMENTAL QUOTIENT OF GIRL CHILD WITH DEMOGRAPHIC CHARACTERISTICS

Demographic Characteristics		No. of girls	Socio-development Quotient				P value
			Normal & above		Below Normal		
			No.	%	No.	%	
Religion	Hindu	386	353	91.5	33	8.5	0.25
	Muslim	14	14	100.0	0	0.0	
Caste	General	54	50	81.5	4	7.4	0.05
	Backward	184	170	92.4	14	7.6	
	SC/ST	148	139	93.9	9	6.1	
Type of	Joint	295	272	92.2	23	7.8	0.58
Family	Nuclear	105	95	90.5	10	9.5	

Edu cation of father.	Illiterate	152	144	94.7	8	5.3	0.20
	Just literate	89	83	93.3	6	6.7	
	Primary/Middle	128	113	88.3	15	11.7	
	Up to high school	15	12	80.0	3	20.0	
	Above high school	1	10	90.9	1	9.1	
	Graduate and above	5	5	100.0	0	0.0	
Edu cation of father	Illiterate	77	73	94.8	4	5.2	0.26
	Just literat	37	34	91.9	3	8.1	
	Primary/Middle	196	182	92.9	14	7.1	
	Up to high school	43	37	86.0	6	14.0	
	Above high school	39	33	84.6	6	15.4	
	Graduate and above	8	8	100.0	0	0.0	
Birth order	I	97	93	95.9	4	4.1	0.04*
	2-3	211	187	88.6	24	11.4	
	4+	92	87	94.6	5	5.4	
SES	I	6	6	100.0	0	0.0	0.32
	II	48	42	87.5	6	12.5	
	III	97	91	93.8	6	6.2	
	IV	138	123	89.1	15	10.9	
	V	111	105	94.6	6	5.4	
Family size	<5	112	104	92.9	8	7.1	0.71
	5-6	155	140	90.3	15	9.7	
	>6	133	123	92.5	10	7.5	

*Significant ($P < 0.05$)

The table-2 shows association of subnormal socio-develop (SD.Q) with environmental characteristics. Use of solid fuel for cooking was found significantly

associated with subnormal SD.Q whereas no association was found with type of drinking water source, sanitation facility and hygienic status of the environment.

Table-2

ASSOCIATION OF SOCIO-DEVELOPMENTAL QUOTIENT OF GIRL CHILD WITH ENVIRONMENTAL CHARACTERISTICS

Environmental characteristics		No. of girls	Socio-development Quotient				X ² , P-value
			Normal & above		Below Normal		
			No.	%	No.	%	
Water facility	Improved water source	359	347	96.6	29	12.3	0.07
	Unimproved water source	41	20	48.7	4	10.1	
Sanitation facility	Improved sanitation	84	78	92.8	6	7.1	0.67
	Unimproved sanitation	316	289	91.5	27	8.5	
Type of fuel	Solid	227	202	88.9	25	11.0	0.02*
	Non-solid	173	165	95.3	8	4.6	
Hygienic status	Hygienic	122	113	92.6	9	7.4	0.67
	Non-hygienic	278	254	91.4	24	8.6	

*Significant (P<0.05)

The table-3 shows subnormal socio-developmental quotients was significantly associated with neglect in clothing, psychosocial support, age of initiation of schooling and violence vis-a-vis boys; where as no statistical association was seen with food allocation. **Shanti Ghosh, Mankekar et al of world watch institute (1992)⁴** showed gender bias brings in grossly unequal allocation of resources for girl child with regard to food, nutrition, education, health and medical care.

The table-4 shows that on applying Multinomial logistic regression to determine the independent role played by the important

predictor for below or subnormal socio-development quotient status (SD.Q<90) (after removing the confounding effects of other factors), it was observed that first birth order was found to be associated normal socio-development quotient status (SD.Q) (negative β coefficient). Similarly absence of neglect in cloth allocation, age of initiation of schooling and violence against girl child vis-a-vis boys had 0.7, 0.4 and 4.4 times odds of subnormal (<90) Socio-developmental quotient respectively. Type of fuel used in household was not an independent factor in determining the socio-developmental quotient.

Table-3
ASSOCIATION OF SOCIO-DEVELOPMENTAL QUOTIENT OF GIRL CHILD WITH CHILD NEGLECT

Characteristics		Socio-development Quotient				P-value
		Normal & above		Below Normal		
		No.	%	No.	%	
Food Allocation	Neglect absent	118	93.7	8	6.3	0.34
	Neglect present	249	90.9	25	9.1	
Cloths Allocation	Neglect absent	213	94.7	12	5.3	0.02*
	Neglect present	154	88.0	21	12.0	
Age for initiation of schooling	Neglect absent	277	95.2	14	4.8	0.000*
	Neglect present	90	82.6	19	17.4	
Need of care and protection (safety)	Neglect absent	239	88.8	30	11.2	0.002*
	Neglect present	128	97.7	3	2.3	
Psychosocial support & stimulation	Satisfactory	234	95.9	10	4.0	0.001*
	Unsatisfactory	133	85.2	23	14.7	
Violence against girl child	Absent	329	94.8	20	5.7	0.001*
	Present	40	75.4	13	24.5	

*Significant (P<0.05)

Table-4

PREDICTORS ASSOCIATED WITH BELOW NORMAL SDQ STATUS (<90) OF GIRL CHILD USING MULTIPLE LOGISTIC REGRESSION

Factors		β coefficient	SE	Odds Ratio (OR)	95% CI of OR
Birth order 0=>1, 1=1	1	-0.18	0.73	0.8	2.0-3.5*
	2-3	0.55	0.55	1.7	0.6-5.1
	4+				
Type of fuel used for cooking		0.37	0.46	1.4	0.6-3.5
Neglect in cloths allocation for girl		-0.32	0.41	0.7	0.3-1.6
Age of initiation for schooling		-0.96	0.40	0.4	0.2-0.8*
Need of care and protection		-1.33	0.64	0.3	0.1-0.9*
Violence against girl child		1.50	0.50	4.4	1.7-11.9*
Constant=-1.66					

-2 Loglikelihood=182.69, $R^2=0.25$, *significant

Conclusion :

Among all the predictors of subnormal socio-developmental first birth order was found to be an independent predictor. Age of initiation of schooling, violence against girl child and neglect in need of care and protection were also found to be an independent predictor of subnormal psycho-socio developmental.

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TREATMENT SEEKING BEHAVIOUR AMONG THE CASES OF EYE DISEASE IN THE RURAL AREAS OF ALLAHABAD DISTRICT

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ABSTRACT:

Research question: What various types of health facilities are present in the specified rural areas and treatment seeking behaviour of cases of eye diseases in that area.

Objectives:

To access the effect of the treatment seeking behaviour of the cases and outcome of the treatment.

Study Design: Cross sectional study design.

Settings: Households of the village of Allahabad district.

Methods: A total of eight villages were selected from the two blocks namely Jasra and Saidabad with the help of multistage random sampling technique.

Result: Out of total 931 cases of eye disease a maximum of 56.07% did not go anywhere for treatment. Amongst the remaining 20.84% cases went to PHCs/ CHCs/ district hospitals and 11.82% cases went to general practitioners for treatment. Out of total 409 cases who sought treatment, a maximum of 95.11% has taken Allopathic treatment followed by 1.96% cases who had taken Ayurvedic treatment. Various practices like jhad phoonk, kajal surma were followed by 1.47% cases, 1.22% cases sought Homeopathic treatment; while 0.24% went to Unani doctor.

Key words: Eye diseases, cataract surgery, treatment seeking behaviour.

Introduction:

Indian has 8.9 million blind out of 45 million blind present in the world. But the economically blind according to the National health Surveys conducted in 1971-74 by Indian Council of Medical Research (ICMR) are 1.38% and according to **National Programme for Control of Blindness /WHO survey (NPCB/WHO 1986-89)** 1.49%. Major economically blinding conditions are cataract (80.1%), refractive errors (7.35%), corneal scar (4%), trachoma (0.39%), glaucoma (2%), Vitamin A deficiency (1%), and other rare causes (5%). Blindness due to smallpox, trachoma and Vitamin A deficiency have gone

down remarkably. With socioeconomic development and improvement of personal hygiene the incidence of infections has come down, although the prevalence of blindness has increased from 1.3% in 1971 to 1.49% in 1986. High prevalence has been observed in Andhra Pradesh, Bihar, Madhya Pradesh, Uttar Pradesh, Maharashtra and Tamil Nadu. These states contribute nearly two-third cases of blindness in India. The blindness due to cataract has increased from 55% (1971) to 81% (1986). It is observed that blindness is more common in rural than urban areas, more in females than in males, and more amongst the poor than rich. Incurable blindness is just 10% of the total.

Aims and objective :

The present study was conducted in the rural areas of Allahabad district with the following aims and objectives:-

1. To study the treatment seeking behaviour of community for eye care.
2. To access the outcome of the treatment sought by the cases.
3. To suggest some preventive measure for early diagnosis and treatment for proper eye care.

Material and methods :

The present study was conducted in the Department of Community Medicine, M. L.N. Medical College Allahabad district. Cross sectional study design was adopted in the present study. A multistage random sampling technique was adopted to select the study subjects. At the first stage a sample of two blocks out of total blocks of Allahabad district was drawn at random. A block was covered by Community Health Centre or Primary Health Centre in the district. Within each selected first stage unit that was the block a sample of two PHCs or new PHCs was drawn randomly as second stage units. From each selected second stage unit, one Sub Centre was selected in order to have a sample of four sub centres as third stage units. From each selected Sub Centre, a sample of two villages was drawn. In this way a sample of eight villages was available as fourth stage units. All members in the selected households were surveyed and comprised study unit in the present study. Optimal sample size was calculated on the basis of pilot survey results where in about 75% households has the cases of eye diseases. Based on this the sample size was obtained to be 750 households using the following formula ($n_{opt} = 4p(1-p)/L^2$)

Observations :

Table 1 shows distribution of eye diseases by socioeconomic status of the cases. The highest number of 399(42.86%) cases of eye diseases was observed in socioeconomic class V and successively followed by 244 (26.21%) cases of the class IV, 167 (17.94%) cases of the class III, 95 (10.20%) cases of Class II and the lowest 26(2.79) cases was of class I. A similar pattern was also observed for individual diseases of eyes. Out of total cases of cataract, 152 (38.97%) were belonging to class V and 9 (2.31%) to class I.

The treatment seeking behaviour of persons with eye problems in the present study observed maximum of 522 (56.07%) did not go any where for treatment. Amongst the remaining 194 (20.84%) cases went to PHCs / CHCs, district hospitals and 110 (11.82%) cases went to general practitioners. Only 59 (6.34%) of persons went to specialized hospitals.

Regarding the treatment of eye diseases, out of total 409 cases, a maximum of 389 (95.11%) had taken allopathic treatment followed by 8(1.96%) cases who had taken Ayurvedic treatment. Various practices like jhad phoonk, kajal and surma were followed by 6(1.47%) cases, 5(1.22%) cases sought Homeopathic treatment while a single case (0.24) went to Unani doctor (Table 2).

Table 3 shows the outcome of the treatment among the cases who had taken any type of treatment. Out of total cases, 139(35.64%) had got only, symptomatic relief followed by 111(27.14%) cases who had recovered completely. there were 106 (25.92%) cases who told that there was no improvement from the treatment, while 53 (12.96%) cases told that they had got only partial relief by the treatment.

Table 1
DISTRIBUTION OF EYE DISEASES BY SOCIOECONOMIC STATUS

Diseases of eye	Class I	Class II	Class III	Class IV	Class V	Total
	No.(%)	No. (%)	No.(%)	No.(%)	No. (%)	
Cataract/ Aphakia	9(2.31)	46(11.79)	76(19.49)	107(27.44)	152(38.97)	390(41.89)
Refractive efforts	6(2.99)	24(11.94)	48(23.88)	61(30.35)	62(30.85)	201(21.59)
Glaucoma	2(4.44)	5(11.11)	8(17.78)	11(24.44)	19(42.22)	45(4.83)
Infective diseases of eye	1(2.27)	2(4.55)	7(15.91)	6(13.64)	28(63.64)	44(4.73)
Xeroph thalmia	0(0.00)	4(4.21)	7(7.37)	16(16.84)	68(71.58)	95(10.20)
Uveitis	0(0.00)	2(6.67)	2(6.67)	5(16.67)	21(70.00)	30(3.22)
Corneal opacity	4(9.52)	4(9.52)	7(16.67)	10(23.81)	17(40.48)	42(4.51)
Others	4(4.76)	8(9.52)	12(14.29)	28(33.33)	32(38.10)	84(9.02)
Total	26(2.79)	95(10.20)	167(17.94)	244(26.21)	399(42.86)	931(100)

Table 2
TYPES OF TREATMENT SOUGHT

Types of treatment	No. of cases	Percentage
Allopathic	389	95.11
Ayurvedic	8	1.96
Homeopathic	5	1.22
Unani	1	0.24
Others (Surma, Kajal Jhad phoonk)	6	1.47
Total	409	100

Table 3
OUTCOME AFTER TREATMENT

Outcome after treatment	No. of cases	Percentage
Full recovery	111	27.14
Partial recovery	53	12.96
Only symptomatic relief	139	35.64
No improvement	106	25.92
Total	409	100

$\chi^2=37.81662$ df-3 (>7.82 the tab. Value at 5% level of significance), $p<0.0001$

Discussion :

The present study has shown a gradual rise in the prevalence of ocular morbidity from high socioeconomic class to low socioeconomic class e.g. 26(2.79%) cases among class I, 95 (10.20%) cases among class II, 167 (17.94%) cases among Class III, 244(26.21%) cases among Class IV, 399 (42.86%) cases among class V, and the similar trend has been seen for individual eye diseases i.e. cataract, refractive errors, Glaucoma, Infections, Xerophthalmia, Uveitis, Corneal Opacity and others.

Sharma et al have observed similar findings in year 1962. They have observed a close correlation between the prevalence, incidence of ocular problems and socio-economic status. It was seen that there was a gradual rise in the prevalence with the lowering of socio-economic status. The rates were 5.67% and 5.1% for class V and IV respectively as compared to 2.8%, 3.7%, and 4.3% for class I, II, III respectively.

Similarly in the study of O.P. Pandey (1983), the prevalence rate was highest amongst social class IV (70.9%) and lowest in social class III and I being 47.38% and 47.8%

respectively.

The treatment seeking behaviour of persons with eye problems in the present study observed maximum of 522 (56.07%) did not go anywhere for treatment. Amongst the remaining 194 (20.84%) cases went to PHCs/CHCs/ district hospitals and 110 (11.82%) cases went to general practitioners. Only 59 (6.34%) of persons went to specialized hospitals. Among those (409 cases) who have sought any treatment, a maximum of 389(95.11%) had taken Allopathic treatment followed by 8 (1.96%) cases who had taken Ayurvedic treatment. Various practices like jhad phoonk, kajal and surma were followed by 6(1.47%) cases, 5(1.22%) cases sought Homeopathic treatment while a single case (0.24) went to Unani doctor (Table 2).

Similarly Agarwal A.K. et al (1996), after reviewing 100 patients with advance stage glaucoma in the hospital setup, observed that majority of patients (70%) did not know that they were suffering from the eye disease as they never sought any ophthalmic consultation, only 30% patients knew their disease but had poor knowledge regarding course and severity of

their disease. Agarwal A.K. et al (1996), after reviewing 100 patients with advance stage glaucoma in the hospital setup, showed that 70% patients never sought any ophthalmic consultation the reasons for neglect were, 20% got treatment by quacks, 15% had some preserved vision in affected eye or other eye, 15% were inaccessible to hospitals, 10% negligence was due to poverty and 10% due to illiteracy. And only 30% patients sought ophthalmic consultation.

Conclusion and Recommendation :

The study area have well organized primary health care and health care delivery system nearby but due to unawareness of the locale it is not good enough for them to get all types of facility for their ocular health. On basis of the present study the following suggestions can be given to the local health personnel like Aganwari Workers to bring awareness in the community for proper cleanliness and hygiene i.e. the eyes should be washed with clean water and should be wiped with clean towel and should avoid exposure of eyes to household smoke and dust as much as possible. The local health personnel to suggest the parents of

children that for the safety of eyes, their children should be allowed to play only with blunt objects and avoid bows and arrows, gulli danda and such activities.

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AN EPIDEMIOLOGICAL AND CLINICO-PATHOLOGICAL PROFILE OF ORO-MUCOSAL DISEASES AMONGST SUBSTANCE ABUSERS IN KANPUR NAGAR

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ABSTRACT:

Objectives :

1. To assess magnitude of Orol Mucosal diseases in substance abusers in Kanpur.
2. Epidemiological co relates of oro-mucosal disease.
3. To study the clinicopathological profile.

Study Design : A retrospective study

Study Settings : Deptt. of Surgery, G.S.V.M. Medical College, Kanpur

Study Subject : 150 cases of substance abusers various

Study Period : January 2008

Study Variable : Age, Sex, religion socioeconomic status.

Result : In the present study, majority of the substance abusers were male (87%), from rural background (60%) and of low socioeconomic status (70%). The most common substance abused was a consination smokings alcohol intake (26.67), followed by tobacco chewing (14%) in form of guttka. Leukoplakia was most common histopathological lesion in population related to (48%).

Introduction :

About one third of all the cancers affecting lumen oral cavity malignancy. India shows lughest found in India. The highest incidence of oral cancer patients in the world is and all of them could be related to tobacco chewing, smoking and alcohol intake. Early diagnosis of oral cancer is very difficult because there are no screening programmes for oral cancer presently. Keeping in view the high mangnitude of tobacco and alcohol conception since the incidence of tobacco consumes and alcohol is quiet high in and around Kanpur Nagar, we underteck the present study to detect the earliest change in the buccal musoca in oral

cavity cancers preventive and therapeutic measures to combat the problem of oral recomending cavity cancers.

Material and Methods :

In the present study the substance abusers were selected from two sources about 50% were form indoor wards suffering from different diseases and remaining were taken from those attended O.P.D of department of surgery using purposive sampling technique the informations regarding type of substance abuse, duration, quantity, clinical and pathological diagnosis was obtained form the records available in the received section in case of the

indoor patients. While substance abusers attending the OPD the relevant information was obtained on pretested and predesigned questionnaire. The clinical examination was carried out on the spot. After taking direct biopsy from oral mucosa samples were sent for

cyto histopathological examination.

Observation :

The study was carried out in the department of surgery, GSVM Medical college, Kanpur.

Table I
DEMOGRAPHIC PROFILE OF STUDY POPULATION (150)

1. Age (yrs)	Yrs	No.	%
	15-30	37	25%
	30-45	60	40%*
	45-60	45	30%
	>60	8	5%
2. Sex (%)	M	130	87%*
	F	20	13%
3. (%) Religion	Hindu	105	70%*
	Muslim	30	20%
	Sikh	5	4%
	others	10	6%
4. Residential background	Rural	90	60%*
	Semiurban	35	23%
	Urban	25	17%

* shows significant data

Table 2
TYPE OF SUBSTANCE ABUSE

Type of substance	No. of Population	Percentage (%)
Chewing tobacco only	20	13.34
Smoking only	15	10.00
Alcoholism only	15	10.00
Smoking with tobacco chewing	20	13.34
Tobacco chewing with alcohol intake	17	11.34
Smoking with alcohol intake	40	26.67
All	23	15.34
Total	150	100.00

Highest incidence of leukoplakia was seen in group taking all the three substances.

Table 3
ASSOCIATION OF LEUKOPLAKIA WITH DURATION OF SMOKING
CHEWING TOBACCO AND ALCOHOL INTAKE
(Leukoplakia was found in 50 cases only)

Duration of exposure	Total cases	Chewing & Tobacco only	Smoking only	Alcohol only	Chewing & Smoking	Chewing & Smoking	Alcohol & smoking	All
<5 yrs	4	-	1	-	1	-	-	2
5-10 yrs	10	1	1	-	2	1	-	5
>10 yrs	36	1	1	1	4	4	3	22
Total	50	2	3	1	7	5	3	29

Table 4
FINDINGS ON HISTOPATHOLOGICAL EXAMINATION

Histopathological Findings	N=150	%
Epithelial hyperplasia	10	6.67
Mild dysplasia	14	9.33
Moderate dysplasia	30	20.00
Severe dysplasia	8	5.33
CIN	8	5.33
Submucosal fibrosis	75	50.00
Acantholysis / Keratinization	5	3.33

Sub mucosal fibrosis is the most commonly occurring change 50% of cases

Discussion :

Demographic data comparable to wish Vora et al and K.M. Venkat Narayan et al². Use of various substances abused by the population in form of chewing tobacco in various forms (khaini, chuni, and beatel quid / pan gutka / pan masala). Smoking (cigarette, bidi, hukka, chilam) and alcoholism (country liquor and imported/English liquor) comparable as found by Vora et al¹. The most dramatic difference is observed in the group of smoking and alcohol (26.67% vs. 3.4%). This can again be explained on the basis of cheap and easy availability of country made bidi and liquor. tobacco chewing is a very common practice in rural India and has spread its legs in urban area by advent of chuni and guthka. The marked difference in both the subsets of indian populations could be seen because of the fact that most of the cases in the present study were from rural background where chewing tobacco is a very common practice.

Chewing habits in Our study

(Daily=60%, alternate day=20%, regular=80%, weekly/occasionally=10%) this implies almost similar consumption patterns Vora et al¹. Type of tobacco preparation used are almost similar expect for the fact that pan and chuni are more commonly eaten because of the popularity of these two substances in eastern India comparable to Vora et al¹. Smoking is the 2nd most common addiction in this line up with cigarette and beedis being most commonly used in 63% population (80% smokes between 1-3 cigarette / bidis per day). people with low socioeconomic status (<Rs 75 per day) are more likely to develop addiction to tobacco and alcohol as well as develop premalignant conditions of the mouth comparable to Venkatnarayan et al².

The present study showed maximum number of cases (29/50) in the population taking all the three substances followed by smoking and chewing (7/50). This theory is supported by Bhawate⁶, Hashibe⁷, Forlen³, Mehta⁴,

Zachariavh and Pindborg⁵. The most common location for Leukoplakia in our study was buccal mucosa (48.15%) cases followed by gingivolabial sulcus (37.05%) same like **Waldron et al** this can be explained that maximum numbers of smokers in the group used to chew tobacco. Also along with smoking. This could have acted as an additive effect on the development of Leukoplakia in buccal mucosa.

To conclude there is significant association is found with oral mucosa diseases and substance abusers in kanpur region that can be reduced by education and counseling regarding avoiding the use of substances, good oral hygiene and improving socioeconomic status and awareness regarding diseases in rural areas.

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ROLE OF ANESTHESIOLOGIST IN REDUCING MATERNAL MORTALITY RATE IN INDIA

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Key Words :

MMR, Haemorrhage (both ante and post partum) and Toxemia of pregnancy, anaesthetic management, community medicine.

Summary

Maternal mortality continues to be high in India and other developing countries. A high maternal mortality rate not only reflects inadequacy of health services, but also a low standard of living and socioeconomic status. Poor antenatal care, deliveries by untrained birth attendants, unsafe abortions, inadequate services, late referrals, lack of skilled staff at the peripheral hospitals and social factors like poverty and illiteracy lead to various life threatening complications, necessitating intensive care. Only combined efforts of community medicine, good obstetric care and trained anesthesia and intensive care be helpful in reducing MMR.

Introduction :

With 16% of the world's population, India accounts for over 20% of the world's maternal deaths. The maternal mortality ratio, defined as the number of maternal deaths per 100,000 live births, MMR (Maternal Mortality Rate) in India is 407 per 100,000 live births. (1998). In 2000, the United Nations estimated global maternal mortality at 529,000, of which less than 1% occurred in the developed world. However, most of these deaths have been medically preventable for decades, because treatments to avoid such deaths have been well known since the 1950s. According to the WHO, "A maternal death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes."

Obstetrics as a speciality is unique in the every case, elective or emergent, involves an aspect of critical care. Anesthesiologists as critical care specialists play an important role in managing these challenging patients.

Obstetric haemorrhage :

This is the underlying causative factor in at least 25% of maternal deaths. A better understanding of causes and management of obstetric haemorrhage is a valuable guide to resuscitation.

Crystalloids administration, if massive, results in dilutional coagulopathy, which necessitates FFP transfusion. Usually an increase in coagulate factor levels of at least 10% will be needed for any significant change in coagulation status and as 1 unit of FFP increases most factors by 2.5%, at least 4 units of FFP will be required. The availability of blood and FFP is necessary where obstetric care is provided to

avoid mortality in a bleeding parturient.

Pre eclampsia :

It presents with the triad of Hypertension, Proteinuria and Peripheral edema. Eclampsia is the term that denotes one or more grand mal convulsions in a parturient with no previous neurological history. Anesthesiologist has to recognize which category of pre-eclamptic parturient he is dealing with. By the time the patient is transferred from the casualty to the labour ward:

- The BP may reach normal levels
- The BP may remain refractory to conventional antihypertensives like Alphamethyl dopa or Nifedipine.
- The BP may fall and the patient may become hypotensive.

The anesthesiologist should manage hypertension save life both of mother and fetus by using appropriate modifiable technique of anaesthesia like epidural anaesthesia in mild to moderate cases and G.A. in severe cases with appropriate antihypertensive agents like labetalol and understand and identify the exact reason for the hypotension in these treated pre-eclamptic parturient and tailor the management accordingly.

Pulmonary edema in a parturient:

Normally PE (Pulmonary Edema) occurs when LAP exceeds 15-18 mm Hg... In pre-eclampsia, the parturient is hypoproteinemic and plasma oncotic pressure is likely to be low and fluid escapes into the alveoli at a much lower LAP. The association of leaky pulmonary capillaries seen as part of the pathophysiology of pre-eclampsia adds on to the complex haemodynamic situation. All the anesthesiologists should be trained in

identifying an elevated JVP. An elevated JVP should suggest a water-logged patient or a patient in CCF. If oliguria is superadded on this clinical scenario, one should be careful about fluid management.

In Spinal subarachnoid block (SAB) an oliguric, hypoproteinemic pre-eclamptic patient with leaky pulmonary capillaries can trigger pulmonary edema and cardiovascular collapse.

If general anesthesia is given. If the patient is showing tracheal tug, hyperactive neck muscles, predominantly abdominal respiration and falling oxygen saturation, after reversal at the end of surgery, the anesthesiologist must be mentally prepared to artificially ventilate the patient.

Conduct of epidural in parturient with cardiovascular disease :

In a cardiovascular disease patient who is well compensated (Not in tachycardia), and if time permits, a titrated epidural under the cover of a minimal inotropic support can accomplish successful anesthesia.

Any fall in BP is treated by increasing the inotropic support to 5-7 µg/Kg/min. The blood loss occurring during surgery is replaced as 1:1 colloid or 1:2 crystalloid. Patients with cardiac problems like multivalvular heart disease refractory to inotropes and diuretics. GA with elective post op ventilation is the technique of choice. Time factor is also important and if maternal or fetal factor does not allow time for SAB or EA, one should straight away resort to GA.

C.P.R. in parturient :

As critical care physicians, anesthesiologists are the best in resuscitation. Pregnant women pose a few unique problems in CPR. In cardiac arrest the compromise in

venous return and cardiac output by the gravid uterus limits the effectiveness of chest compressions.

To treat the critically ill pregnant patient: Place the patient in the left lateral position. Give 100% oxygen. Establish intravenous (IV) access and give a fluid bolus. Consider reversible causes of cardiac arrest and identify and preexisting medical conditions that may be complicating the resuscitation.

Airway :

Hormonal changes promote insufficiency of the gastroesophageal sphincter, increasing the risk of regurgitation. Apply continuous cricoid pressure during positive-pressure ventilation for any unconscious pregnant woman. Secure the airway early in resuscitation. Use an endotracheal tube 0.5 to 1 mm smaller in internal diameter because the airway may be narrowed from edema.

Breathing :

Pregnant patients can develop hypoxemia rapidly because they have decreased functional residual capacity and increased oxygen demand, so be prepared to support oxygenation and ventilation. Verify correct endotracheal tube placement using clinical assessment.

Circulation :

Perform chest compressions higher on the sternum, slightly above the center of the sternum. This will adjust for the elevation of the diaphragm and abdominal contents caused by the gravid uterus. Vasopressor agents such as epinephrine, vasopressin, and dopamine will decrease blood flow to the uterus. There are no alternatives however to us all indicated medications in recommended doses. The mother must be resuscitated or the changes of

fetal resuscitation vanish.

Defibrillation :

Defibrillate using standard ACLS defibrillation doses. There is no evidence that shocks from a direct current defibrillator have adverse effects on the heart of the fetus.

Emergency hysterotomy for the pregnant woman in cardiac arrest :

The resuscitation team leader should consider the need for an emergency hysterotomy (cesarean delivery) protocol as soon as a pregnant woman develop cardiac arrest. The best survival rate for infants >24 to 25 weeks in gestation occurs when the delivery of the infant occurs no more than 5 minutes after the mother's heart stops beating. This typically requires that the provider begin the hysterotomy about 4 minutes after cardiac arrest. It may seem counterintuitive given that the key to salvage of a potentially viable infant is resuscitation of the mother. But the mother cannot be resuscitated until venous return and aortic output are restored. Delivery of the baby empties the uterus, relieving both the venous obstruction and the aortic compression. The hysterotomy also allows access to the infant so that newborn resuscitation can begin.

Organisational aspect :

An anesthesiologist working in a district headquarters hospital with judicious clinical examination and with knowledge and understanding of basic pathophysiology of anaemia, toxemia etc complicating pregnancy, can administer safe anesthesia. Even a district Headquarters hospital anesthesiologist must be well trained in artificial ventilation because most of the pulmonary or renal complication are reversible after termination of pregnancy. By improving the anesthetic setup in a District HQ

hospital, tertiary centres will be able to concentrate on complicated cases rather than managing normal deliveries.

In developed countries, anesthesiologists are allowed to handle obstetric cases only after two years of anesthesia training. In the first two years, the basic problems in obstetric anesthesia are drilled into his mind through a proper teaching program and algorithms available for every imaginable clinical scenario. Hence, a proper training at the postgraduate level instead of associating obstetric anesthesia with a shot of SAB will go a long way in reducing MMR.

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"HEALTH AWARENESS PROFILE OF LATE ADOLESCENTS (16-19 YEARS) OF A RURAL AREA OF KANPUR"

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ABSTRACT:

Research Question :

What is the level of health awareness profile of late adolescents?

Objectives :

1. To determine level of health awareness among late adolescents.
2. To ascertain association between health awareness and different variables.

Study Design : Cross-sectional

Settings : Naubasta Village of Kanpur.

Participants : 40 adolescents in the age group of 16 to 19 years

Statistical Analysis: Percentage

Result : Regarding health awareness, 70% of adolescents were aware about physical changes during adolescence, moustache & beard in males, (100%) and Breast development in females was identified by 92.8% respondents. All of them were aware about substance abuse and 97.5% reported pan masala & gutkha as a common substance. 90% of adolescents were aware about RTI/HIV/AIDS and most common source of information was T.V. and radio. 72.3% of respondents considered HIV/AIDS as non curable.

Introduction :

Adolescence is defined as the age between 10-19 years. NCERT divides adolescents into three phases: Early adolescence (9-13 years), Mid adolescence (14-15 years) and Late adolescence (16-19 years). Adolescents constitute over 23% of the population in India. Late Adolescents constitute about 10.5% in India. Late adolescents have fully developed physical characters and have formed a distinct identity and have well formed opinions and ideas, so their awareness regarding different health issues should be checked. No such study has been done on this special group (16-19yrs), hence, the present study was

conducted in village Naubasta, Kanpur.

Material and Methods :

All the eligible adolescents have been considered for the study. Total population of village was 513, out of them 40 such late adolescents were identified and interviewed. Some of them could not be contacted though by repeated visits. Village was randomly selected which is one of the R.F.T.C. served villages.

A predesigned and pretested questionnaire was used to collect all the relevant information with informed consent of respondents with proper confidentiality.

Results :

Among all adolescents in the present study (22) 55% were males & (18) 45% were females. Majority of them (70%) were educated up to high school & above. By occupation, 62.5% were students, 20% were employed in one or other jobs & remaining 17.5% were not employed. Religion wise 97.5% were Hindu & rests were muslim. Regarding health awareness, 70% of adolescents were aware about physical changes during adolescence and all of them identified appearance of moustache & beard in male as a common physical change. Breast

development in females was identified as physical changes by (92.8%) respondents. Muscular built and change in voice each were identified by 25% respondents. 95% were aware about balanced diet and only 47.5% were aware about anaemia. All of them were aware about substance abuse and 97.5% reported pan masala & gutkha as a common substance abuse. 90% of adolescents were aware about RTI/HIV/AIDS and most common source of information was T.V. and radio. 72.3% of respondents considered HIV/AIDS as non-curable.

Table-1

EDUCATIONAL STATUS OF RESPONDENTS

Educational Status	Male	Female	No	%
Illiterate	1	1	2	5.0
Just literate	0	2	2	5.0
Primary	1	1	2	5.0
Middle	2	4	6	15.0
High School	8	2	10	25.0
Intermediate	5	4	9	22.5
Above I.M.	5	4	9	22.5
TOTAL	22	18	40	100

Table-2

OCCUPATIONS OF LATE ADOLESCENTS

Status	Male	Female	No	%
Student	14	11	25	62.5
Working	7	1	8	20.0
Non working	1	6	7	17.5
Total	22	18	40	100.0

Table-3
AWARENESS ABOUT PHYSICAL CHANGES*

AWARENESS	(N=28)		RESPONSES
	MALE	FEMALE	N(%)
	19	9	28(100)
PIMPLES APPEAR	10	8	18(45.0)
BREAST DEVELOPMENT	17	9	26(92.8)
MOUSTACHES & BEARD	19	9	28(100.0)
PUBIS & AXILLARY HAIRS	18	7	25(89.2)
WEIGHT GAIN	5	5	10(35.7)
MUSCULAR BUILT	5	2	7(25.0)
CHANGE IN VOICE	5	2	7(25.0)
MENARCHE	16	9	25(89.2)

Table-4
AWARENESS ABOUT BALANCE DIET

Awareness	Male	Female	Total	%
Yes	21(95.5%)	17(94.4%)	38	95
No	1(4.5%)	1(5.6%)	2	5
Total	22	18	40	100

Table-5
AWARENESS ABOUT ANAEMIA

Awareness	Male	Female	Total	%
Yes	11(50%)	8(44.4%)	19	47.5
No	11(50%)	10(55.6%)	21	52.5
Total	22	18	40	100

Table-6
AWARENESS ABOUT SUBSTANCE ABUSE*

Substances	Male	Female	Total
Tobacco	22(100%)	16(88.9%)	38(95%)
Panmasala & Gutkha	22(100%)	17(94.4%)	39(97.5%)
Smoking	22(100%)	14(77.8%)	34(90%)
Charas & Ganja	18(81.8%)	6(33.3%)	24(60%)
Alcohol	22(100%)	15(83.3%)	37(92.5%)
Bhang	18(81.8%)	7(38.9)	25(62.5%)
Heroin	6(27.3%)	2(11.1%)	8(20%)
Smaick	5(22.7%)	1(5.6%)	6(15%)

Table-7(A)

AWARENESS ABOUT RTI/HIV/AIDS

Awareness	Male	Female	Total
Yes	22(100%)	14(77.8%)	36(90%)
No	0(0.0)	4(22.2%)	4(10.0%)
Total	22	18	40(100%)

Table-7(B)

SOURCE OF HIV/AIDS RELATED KNOWLEDGE*

Sources	Male N ₁ =22	Female N ₂ =14	Total N=36
Ratio/T.V.	22(100%)	14(100%)	36(100%)
Newspaper/ Magazine	12(54.4%)	8(57.1%)	20(55.6%)
Health worker/ Doctor	7(31.8%)	0(00)	7(19.4%)
School teacher	9(40.9%)	2(14.3%)	11(30.6%)
Banner/ Wall writing	5(22.7%)	0(00)	5(13.9%)
Friends / Relatives	20(90.9%)	6(42.9%)	26(72.2%)
Parents	0(0.0)	0(0.0)	0(0.0)

* Multiple choice

Table-7 (C)
KNOWLEDGE ABOUT CURE OF HIV/AIDS

Possibilities	Male	Female	Total
Curable	2(9.1%)	0(0.0%)	2(5.5%)
Non-Curable	17(77.3%)	9(64.3%)	26(72.3%)
Do not Know	3(13.6%)	5(35.7%)	8(22.2%)
Total	22	14	36(100%)

Conclusions :

Awareness regarding different issues was adequate among adolescents. Most of them were educated and although they were aware but have some hesitation about physical changes in adolescents girls. A awareness about anaemia was very less. Regarding source of information about HIV/ AIDS; TELEVISION / RADIO was most common, by teacher and health workers were less and by parents it was nil.

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STUDY OF MORBIDITY PATTERN IN GERIATRIC POPULATION AND CORRELATION OF HOUSING CONDITIONS WITH RELEVANT MORBITIES IN A RURAL AREA OF KANPUR

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ABSTRACT:

Research question : What is morbidity pattern among geriatric population (60 years and above) in rural area of Kanpur and its relation with housing conditions.

Objectives :

To assess morbidity profile among geriatric population and housing conditions.

Study Design : Cross Sectional

Settings : A rural area of Kanpur.

Study Subject : 120 people aged 60 years and above.

Statistical Analysis : Proportions and percentages.

Result : Out of 120 geriatric populations 53 were males while 67 were females. 64.5% of males were illiterate while illiterate females were 66.7%. 76.1% of geriatric population belongs to socioeconomic class IV & V. 80.4% of geriatric people have some or other kind of morbidity. Respiratory and musculoskeletal morbidities were more prevalent in persons living in poor housing conditions.

Key words : Morbidity pattern, Geriatric population, Rural area.

Introduction :

India is characterized by significant rural based living, economic inequalities, increasing generation gap and declining sex ratio. Previous available data on geriatric morbidity shows about 90% of geriatric population suffer from some or other type of morbidity. According to one UN projection 21% of Indian population will be 60+ after 2050 which was 6.8% in 1991². There are differences in morbidity prevalence with respect to place of living (rural or urban), socioeconomic class and gender. Geriatric population in addition suffers from degenerative diseases adding to their disease burden. Careful health planning and timely interventions over a life long course

especially at village level will greatly help towards achieving the goal of healthy aging. This is particularly important in geriatric medicine as the prevalence of disability is strongly related to age and is often associated with loss of ability to carry out activities necessary for daily living³.

Material and methods :

A cross sectional study was done in a rural area of Kanpur. All persons aged 60 years and above were included in the study. A total of 120 geriatrics were contacted in the study. Each individual was interviewed and examined. Information regarding history of current and past illness was taken. Housing condition was

assessed taking living space, ventilation, lighting & cleanliness into consideration. The information was collected on predesigned and pretested proforma. Data collected was analyzed using percentages and chi square test.

Criteria for diagnosis :

Morbidities evident on basis of history of present illness, clinical examination along with medical records available with patient available were included in the study.

Results :

Table 1

AGE, SEX AND LITERACY STATUS OF STUDY POPULATION

Age/Literacy	Males (53)		Females (67)	
	Illiterate	literate	Illiterate	literate
60-65	16(30.2)	10(18.9)	22(32.8)	6(8.9)
66-70	9(16.9)	4(7.5)	16(23.9)	5(7.5)
71-75	5(9.4)	2(3.8)	6(8.9)	4(6.0)
76-80	4(7.5)	0(0)	1(1.5)	4(6.0)
81-85	1(1.9)	2(3.8)	3(4.5)	0(0)
Total	35(66.0)	18(15.0)	48(71.6)	19(28.4)
N=120	N ₁ =53		N ₂ =67	

This table shows that 66% males were illiterate while 71.6% females were illiterate. Maximum people belonged to age group 60-75⁺.

Table 2

MORBIDITY PROFILE OF STUDY POPULATION - AGE & SEX WISE

Age/Sex	60-70		71-80		81 & above		N=120
	M	F	M	F	M	F	
Morbidity							
Vision	31(79.4)	41(83.7)	5(45.5)	11(73.3)	2(66.6)	3(100)	93(77.5)
M.skeletal	8(20.5)	15(30.6)	6(54.5)	7(46.7)	3(100)	3(100)	42(35)
Resp. disorders	3(7.7)	9(18.4)	3(27.3)	5(33.3)	2(66.6)	2(66.6)	24(20)
CNS	2(5.2)	4(8.2)	7(63.6)	5(33.3)	0(0)	3(100)	21(17.5)
CVS	7(17.9)	4(8.2)	2(18.2)	4(26.7)	1(33.3)	1(33.3)	19(15.8)

Skin	2(5.2)	4(8.2)	3(27.2)	5(33.3)	1(33.3)	1(33.3)	16(13.3)
GIT	3(7.7)	2(4.1)	3(27.2)	3(20)	2(66.6)	1(33.3)	14(11.7)
Hearing	1(2.6)	3(6.1)	3(27.2)	1(6.7)	1(33.3)	1(33.3)	10(8.3)
Psych.	0(0)	2(4.1)	1(9.1)	5(33.3)	0(0)	1(33.3)	9(7.5)
Genito.	0(0)	1(2)	2(18.2)	3(20)	0(0)	1(33.3)	7(5.8)
ENT	1(2.6)	0(0)	2(18.2)	1(6.7)	0(0)	0(0)	4(3.3)
Others	0(0)	0(0)	2(18.2)	0(0)	0(0)	0(0)	2(1.7)
Total	58	85	39	50	12	17	261

This table shows 77.5% geriatrics have ocular morbidities followed by musculoskeletal in 35%. Respiratory problems contributed 20% to morbidities. Neurological and cardiovascular problems together contributed 33%. Psychiatric problems were more prevalent in females.

Table 3

RESPIRATORY DISORDERS IN RELATION TO HOUSING CONDITION

HOUSING CONDITION		RESP. DISORDERS	
		N=24	%
SPACE	Adequate	10	41.67
	Inadequate	14	58.33
VENTILATION	Adequate	9	37.50
	Inadequate	15	62.50
LIGHTING	Adequate	11	45.83
	Inadequate	13	54.17
CLEANLINESS	Adequate	10	41.67
	Inadequate	14	58.33

Out of all persons suffering from respiratory disorders, 58.33% were having inadequate living space, 62.50% have inadequate ventilation 54.17% have inadequate lighting & 58.33% have inadequate cleanliness.

Table 4

MUSCULOSKELETAL DISORDERS IN RELATION TO HOUSING CONDITION

HOUSING CONDITION		MUSCULOSKELETAL DISORDERS	
		N=42	%
SPACE	Adequate	16	38.10
	Inadequate	26	61.90
VENTILATION	Adequate	13	30.10
	Inadequate	29	69.90
LIGHTING	Adequate	18	42.86
	Inadequate	24	57.14
CLEANLINESS	Adequate	17	40.48
	Inadequate	25	59.52

Out of all persons having musculoskeletal problems, 61.90% have inadequate living space, 69.90% have inadequate ventilation, 57.14% have inadequate lighting & 59.52% have inadequate cleanliness.

Discussion :

It is responsibility of state to protect the health of old people within its economic capabilities and is mandated in article 41 of constitution of india⁵.

Study shows that 77.5% of geriatric population was suffering from ophthalmic problems followed by musculoskeletal 35% and 20% had respiratory problems. Neurological and cardiac problems constituted 33% of morbidities followed by skin, G.I.T. and other problems.

Study also shows that all parameters of housing were adversely placed in interviewed families and respiratory and musculoskeletal problems were more prevalent in persons living in poor housing conditions.

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ASSESSMENT OF AWARENESS LEVEL REGARDING RABIES AMONGST SCHOOL STUDENTS IN KANPUR NAGAR

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ABSTRACT:

Research Question :

What is the awareness level of rabies amongst school students of Kanpur Nagar?

Objectives :

01. To assess the awareness level of students about rabies.
2. To find out possible ways to enhance their awareness through formal and informal education strategy.

Study Design : Cross-sectional

Settings : Students of government inter college at Kanpur nagar **Participants:** 85 school students of class 9th & 11th.

Statistical analysis : percentage

Result : Occurrence of rabies in animals was accepted by 66.1%. Regarding symptoms of the disease anxiety was considered by most of the respondents followed by hydrophobia and others.

Introduction :

Rabies is caused by the Lyssa virus which is present in saliva of rabid animals and result in fatal encephalitis. In 2003 for the first time a country wide national multicentric community based survey was done by Association for Prevention and control of Rabies in India (APCRI), which revealed-high dog man ratio, dogs and cats largely responsible for human mortality, 20% use of Rabies vaccine, high stray dog problem and only 4.3% Muncipal dog licensing. The present study was planned to cover teenage school going children regarding their awareness about rabies as they form the most susceptible group for animal and dog bite.

Material and Method :

A cross sectional study was planned using multistage random sampling technique for respondents from government boys higher secondary schools at Kanpur In first stage two randomly selected H.S. school were taken. In second stage 10th class was selected among class 9th 10th 11th and 12th. Total 85 students were interviewed by using pre-designed and pre-tested questionnaire.

Results and Discussion :

62.4% respondents belonged to General Caste 20% Scheduled Caste and 17.6% Other Backward Class. Only 12.9% respondents are found having pets. 72.9% of all have herd about rabies and 61.3% could answer rabid dog bite

can cause rabies. Virus as a causative agent was identified by 51.6% and Brain as a organ involved by 35.5%. 25.8% responded hundred percent case fatality rate while 14.5% did not know. 66.1% knew rabies also occurring in animals and anxiety along with hydrophobia was considered as a most common symptom in humans by majority of them. Knobel DL et al

2008, reported in their study 14% house hold surveyed having dog. The percentage of dog owning house holds was highest in rural areas and lowest in costal urban communities. Lung AK et al 2007, reported hyperexcitability, autonomic dysfunction, hydrophobia and aerophobia are characteristics of encephalitic rabies which accounts for 80% the cases.

Table-1

AWARENESS ABOUT RABIES

Awareness	Number	Percentage
Present	62	72.9
Absent	23	27.1
Total	85	100.00

Table-2

CAUSES OF RABIES

Causes	Number	Percentage
Rabid dog bite	38	61.3
Prick by nails	3	4.8
Licking of wounds	21	33.9
Total	53	100.00

Table-3

ORGANISM RESPONSIBLE FOR RABIES

Organism	Number	Percentage
Viruses	32	51.6
Bacteria	18	29.0
Parasites	7	11.3
Don't know	5	8.1
Total	62	100.00

Table-4
SYMPTOMS OF RABIES (Multiple Response)

Symptoms	Number	Percentage
Anxiety	55	88.7
Hydrophobia	47	75.8
Photophobia	10	24.4
All above	7	11.3
Vomiting	4	6.5

Table-5
SYMPTOMS OF A RABID DOG

Symptoms	Number	Percentage
Purposeless running	13	21.0
Continuous salivation	19	30.6
To catch moving objects	14	22.6
All of above	16	25.8
Total	62	100.00

Conclusion and Recommendation :

Majority of the students were lacking adequate knowledge about symptoms of Rabies both in man and animals. Only a few of them were having correct information about causation and causative organism of Rabies. The awareness regarding Rabies should be given to this group of children as they are most susceptible for animal bites specially stray dogs. School administration and parent should seek medical help if child is bitten. Government should increase their efforts to vaccinate stray dogs and promote municipal licensing for pet dogs.

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BIO-SOCIAL CHARACTERISTICS OF NEW ENTRANTS OF G.S.V.M. MEDICAL COLLEGE, KANPUR

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ABSTRACT:

Research Question :

What are the bio-social characteristics of first year medical entrants?

Objectives :

1. To find out the bio-social characteristic of first year medical entrants
2. To find out the educational background of students

Study Place : G.S.V.M. Medical College Kanpur

Study Period : 2000-2004

Sampling technique : Simple random sampling

Sample size : 445

Statistical analysis : Percentage

Study variable : Age, Sex, parents education and occupation

Result : Out of total 65.39% belonged to age group less than 21 years, 67.19% male, 91.91% Hindu and 3.15% were married. 61.35% were from urban communities and 27.19% student's parents with professional education. More than 2/3rd of students had done their intermediate from Hindi medium institutions.

Conclusion : First year entering students predominantly belonged to less than 21 years, male from Hindu community and urban area and of Hindi medium schools.

KEYWORDS - type of residence, parent's education and occupation.

Introduction :

The aim of medical education is to produce doctors who will promote the health of all people and that aim is not being realized in many places, despite the enormous progress that has been made during this century in the biomedical sciences. The individual patient should be able to expect a doctor trained as an attentive listener, a careful observer, a sensitive communicator and an effective clinician, but it is no longer enough only to treat some of the sick. Thousands suffer and die every day from diseases that are preventable, curable of self-

inflicted and millions have no ready access to health care of any kind⁽¹⁾. Unfortunately, in spite of the nation commitment to provide health to its entire people half a century back, commendation and policy formulation to reorient medical education to produce socially motivated health care providers have mostly remained in papers. With a strong lobby of commercialization, privatization and high quality care on one hand and comparatively weak regulatory function of MCI on the other, efforts to reorients medical curriculum to match policy goals have been defeated. Reaching out health to all will remain a mockery if medical

education in the country is not reoriented to meet in health care needs of its majority especially in rural areas⁽²⁾.

A basic doctor to effectively deliver health care to the country must be an astute clinician, a good communicator, good educator and a sound administrator, so as to effectively lead and ever expanding health team for a positive health action work. The action domain of the doctor has crossed the boundaries of drugs and dispensaries and Presently extends to a large

extent to the families and to the communities- hence the need for the basic doctor to be a community physician.

Methodology :

Simple random sampling technique was used to select the desired sampling units. 50% of first year students entering each year (from 2000-2004) were randomly selected. As a whole a total of 445 students were interviewed in pre-designed and pre-tested questionnaire regarding their biosocial characteristics.

Results :

Table No. 1

AGE-WISE DISTRIBUTION OF STUDENTS

Age Group	Year of Admission					Total
	2000	2001	2002	2003	2004	
<19 Yrs	22(24.72)	23(15.48)	13(14.94)	25(25.77)	16(18.18)	89(20)
19-21 Yrs	51(57.3)	46(54.76)	33(37.93)	39(40.21)	33(37.5)	202(45.39)
21-23 Yrs	13(14.61)	17(20.24)	32(36.78)	19(19.59)	26(29.55)	107(24.04)
>23 Yrs	3(3.37)	8(9.52)	9(10.34)	14(14.43)	13(14.77)	47(10.56)
Total	89(100)	84(100)	87(100)	97(100)	88(100)	445(100)

Out of total 445 students surveyed, Maximum number of students belonged to 19-21 yrs of age group i.e. 45.39% and lowest number from the age group >23 years i.e. 10.56% .

Table No. 2

SEX WISE DISTRIBUTION OF STUDENTS

Sex	Year of Admission					Total
	2000	2001	2002	2003	2004	
Male	58(65.17)	56(66.67)	49(56.32)	62(63.92)	74(84.09)	299(67.019)
Female	31(34.83)	28(33.33)	38(43.68)	35(36.08)	14(15.19)	146(32.81)
Total	89(100)	84(100)	87(100)	97(100)	88(100)	445(100)

Overall male to female ratio was observed as 2:1. However this ratio was more for male in year 2004 i.e. 5.6:1 and almost equal in year 2002.

Table No. 3

SOCIAL CHARACTERISTICS OF STUDENTS

Characteristic	Year of Admission					Total
	2000	2001	2002	2003	2004	
Hindu	86(96.33)	75(89.29)	80(91.95)	84(86.6)	84(95.45)	409(91.91)
Muslim	3(3.37)	9(10.71)	7(8.05)	13(13.4)	4(4.45)	36(8.09)
Upper	54(60.67)	40(47.62)	46(52.87)	15(46.39)	33(37.5)	218(48.99)
OBC	19(21.35)	20(23.81)	28(32.18)	29(29.9)	36(40.91)	132(29.66)
SC/ST	16(17.98)	24(28.57)	13(14.94)	23(23.71)	19(21.59)	95(21.35)
Married	2(2.25)	4(4.76)	2(2.3)	0(0)	6(6.82)	14(3.15)
Unmarried	87(97.75)	80(95.21)	85(97.7)	97(100)	82(93.18)	431(96.85)
Total	89(100)	84(100)	87(100)	97(100)	88(100)	445(100)

In total 445 students, majorities were Hindu (91.91%), and Caste wise distribution was as 2:1:1 (Upper:OBC:SC/ST) and only 3.15% of students were married before the time of admission.

Table No. 4

DISTRIBUTION OF STUDENTS ACCORDING TO DIET, WEIGHT AND HEIGHT

Characteristic	Year of Admission					Total
	2000	2001	2002	2003	2004	
Diet						
Veg	58(65.17)	38(45.24)	31(35.63)	56(57.73)	51(57.95)	234(52.58)
Non-Veg	31(64.83)	46(54.76)	56(64.37)	41(42.27)	37(42.05)	211(47.42)
Weight						
<46 Kg.	10(11.24)	16(19.05)	8(9.2)	18(18.56)	15(17.03)	67(15.06)
46-50 Kg	19(21.33)	16(19.05)	16(18.39)	14(14.43)	21(23.86)	86(19.33)
51-55 Kg	16(17.98)	14(16.67)	12(13.79)	19(19.59)	9(10.23)	70(15.73)
56-60 Kg.	34(38.2)	20(23.81)	14(16.09)	16(16.49)	23(26.12)	107(24.04)
>60 Kg	10(11.24)	18(21.43)	37(42.53)	30(30.93)	20(22.73)	115(25.84)

Height						
<160	42(47.19)	55(65.46)	38(43.68)	40(41.24)	32(36.36)	207(46.52)
160-170	43(48.31)	23(27.38)	28(32.18)	49(50.52)	45(51.14)	188(47.25)
>170	4(4.49)	6(7.14)	21(24.14)	8(8.25)	11(12.5)	50(11.24)
Total	89(100)	84(100)	87(100)	97(100)	88(100)	445(100)

In total the distribution of vegetarian was almost equal as non-vegetarian. However in the year 2000, the majority of students were vegetarian and in year 2002, majority were non-vegetarian. Almost half of the students were more than 55 Kg, the height of students varied from <160->170 cm. The majority were in between 160-170 cm. with fewer number having heights >170 cms.

Table No. 5

DISTRIBUTION OF STUDENTS ACCORDING TO PARENTS RESIDENCE & EDUCATION

Items	Year of Admission					Total
	2000	2001	2002	2003	2004	
Residence						
Rural	29(32.58)	33(39.29)	32(36.78)	38(39.18)	40(45.45)	172(38.65)
Urban	60(67.42)	51(60.71)	55(63.22)	59(60.82)	48(54.55)	273(61.35)
Father's Education						
Illiterate	3(3.37)	4(4.76)	1(1.15)	1(1.03)	1(1.14)	10(2.25)
Up to 12 Stands	18(20.22)	20(23.81)	32(36.78)	38(39.18)	30(34.09)	138(31.01)
Graduate & Above	44(49.44)	40(47.62)	19(21.84)	30(30.93)	43(48.86)	176(39.55)
Professional	25(28.09)	21(25)	34(39.08)	28(28.87)	14(15.91)	122(27.19)
Mother's Education						
Illiterate	14(15.73)	13(15.48)	11(12.64)	15(15.46)	16(18.18)	69(15.51)
Up to 12 Stands	32(35.96)	48(57.14)	52(59.77)	48(49.48)	43(48.86)	223(50.11)
Graduate & Above	40(44.94)	22(26.19)	18(20.68)	32(32.99)	29(32.95)	141(31.68)
Professional	4(4.49)	2(2.38)	5(5.75)	3(3.09)	0(0)	14(3.15)
Total	89(100)	84(100)	87(100)	97(100)	88(100)	445(100)

The ratio of students from urban to rural was almost 2:1, Regarding educational status of parents the majority of fathers were educated Graduate & above while mothers were either up to 12 standard or illiterate. Only 31.68% of students, mothers were educated Graduate & above.

Table No. 6

DISTRIBUTION OF STUDENTS ACCORDING TO PARENTS OCCUPATION

OCCUPATION	Year of Admission					Total
	2000	2001	2002	2003	2004	
Father						
Business	14(15.73)	10(11.9)	24(27.59)	14(12.43)	12(13.64)	74(16.63)
Agricultural	12(13.48)	21(25)	10(11.49)	23(23.71)	20(22.73)	86(19.33)
Service	62(64.66)	53(63.1)	53(65.42)	59(60.82)	52(59.09)	279(62.7)
Others	1(1.12)	0(0)	0(0)	1(1.03)	4(4.55)	6(1.35)
Mother						
Housewife	5(84.2)	73(86.9)	75(86.21)	64(65.98)	77(87.5)	364(81.8)
Business	0(0)	3(3.57)	5(5.75)	3(3.09)	2(2.27)	13(2.92)
Agricultural	3(3.37)	7(8.33)	6(6.9)	18(18.56)	6(6.82)	40(8.99)
Service	10(11.24)	1(1.19)	1(1.15)	12(12.37)	2(2.27)	26(5.84)
Others	1(1.12)	0(0)	0(0)	0(0)	1(1.14)	2(0.45)
Total	89(100)	84(100)	87(100)	97(100)	88(100)	445(100)

As occupation of parents concerned, predominately fathers (62.7%) belonged to services class and among mothers (81.8%) were housewife.

Table No. 7

DISTRIBUTION OF STUDENTS ACCORDING TO EDUCATIONAL BACKGROUND

Items	Year of Admission					Total
	2000	2001	2002	2003	2004	
Last Education						
12 th	78(87.64)	68(80.95)	75(86.21)	85(87.63)	80(90.91)	386(86.74)
Other	11(12.36)	16(19.05)	12(13.79)	12(12.37)	8(9.09)	59(13.26)
Board						
U.P. Board	54(66.67)	65(77.38)	49(56.32)	65(67.01)	60(68.18)	293(65.84)
Others	35(39.33)	19(22.62)	38(43.66)	32(32.99)	28(31.82)	152(34.16)
Medium						
Hindi	69(77.53)	66(77.38)	48(55.17)	62(70.45)	62(70.45)	306(68.76)
English	20(22.47)	19(22.62)	39(41.83)	35(29.55)	35(29.55)	139(31.24)
No. of Attempts						
First	21(23.6)	9(10.71)	28(32.18)	30(30.93)	8(9.09)	96(21.57)
Second	35(39.33)	35(39.29)	28(32.18)	28(28.87)	19(21.59)	143(32.13)
Third	28(31.46)	31(36.9)	13(14.94)	22(22.68)	31(35.23)	125(28.09)
Forth & More	5(5.62)	11(13.1)	18(20.69)	17(17.53)	30(34.09)	81(18.2)
Total	89(100)	84(100)	87(100)	97(100)	88(100)	445(100)

86.74% of students were having education 12th standards at the time of admission and the ratio of students from U.P. Board verses other boards were 2:1, predominantly belonging to Hindi Medium School. Almost half of students qualified the CPMT/ others entrance exam with one or two attempts while a few (18.2%) qualified entrance examination in more than three attempts.

Discussion :

The diversities among our rural and urban areas are many but the striking feature is that our population is divided in 3:1 ratio in rural and urban areas respectively, despite that the

ratio revers when it comes to the background of doctors in making ⁽⁹⁾ as in the present study only 38.65% of medical entrants were from rural background. Hence more competitive feelings and interest should be inculcated among parents

and students of rural areas, so that after doing medical course, they may not hesitate to work in the rural areas. As far as occupational background is concerned, only 1/5th of medical entrants were having agricultural job in their families. Hence motivation of parents in rural areas for opting medical profession by their children is need of our nation. The majority of medical entrants (65.84%) completed their Intermediate course from U.P. Board institutions hence message can be given in advance to the students that if they aspire for becoming a doctor by state combined pre-medical test (CPMT), they should prefer U.P. board syllabus especially of Hindi medium as depicted in this study that the majority (68.76%) of medical entrants were of Hindi medium.

The need of the hour is to produce not only treating doctor but such physician who are not only treating the disease but providing care, catering to needs of community and thus striking at the root of community problems. The

concept of five star physicians which is now the need of the society, is a competent care provider, community health team manager, community catalyst, communicator and compassionate decision maker. A doctor with all these skills is certainly going to make the difference in the present status of the community health problems.

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