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The Health Conditions of Rural Localities of Madhya Pradesh

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Abstract: Health researchers have paid scant attention towards the health of rural areas. Most of the times, changing lifestyles and the altering environments of a rural setting may modify the health scenario of the rural inhabitants. In the present study we investigate the influence of living in a rural area as described by rural from different parts of the Northern Province of central India. Our analysis focuses on ways in which these rural people appreciate, complain and experience health and their environment and hygiene. Their insights add to our knowledge to understand the plights of rural people and the influence of changing cultural and lifestyles on their health. This qualitative research used approaches from ethnography and grounded theory. National sampling criteria were used to define 'rural' as an area with a population of less than 10,000; therefore, small towns were included. A group of students including two female and four male students were hired and trained for the purposes of the study. Participants were recruited through convenience and snowball sampling. Data collection using a questionnaire that was translated into local language Hindi by the group of students recruited for the purpose. Results revealed that, altogether thirty people from each village ranging in age from 20 to 60years were interviewed. The majority was married and the minority had children still living at home. Most of the people were found to be puffing smoke, guttka etc and were suffering from one or two ailments. In conclusions, health facilities must be equally distributed to ensure equal physical access. Rural development needs focus on methods that lead directly to sustainable programmes to promote the health of rural community. Improving rural health requires innovative, creative and integrative strategies that address both individual health related behaviours and many social determinants of health. It is imperative for any planning effort to think beyond health care services to the more multifaceted social conditions that impact health.

Key words: Rural Setting · Hygiene · Environment · Life Style

INTRODUCTION

Health researchers have paid little attention to the role of place in health except as settings where interventions take place and even less attention have been given to the influence of rural context on health [1]. Health is not merely an issue of doctors, social services and hospitals, but also an issue of social justice is ivolved. Among the definitions are still used, probably the oldest is that health is the absence of disease. In rural areas people have many problem related to health [2].

Healthcare continues to be a neglected aspect, however, during the past few decades; there has been a reawakening to establish that health is a fundamental human right and, that it is essential to the satisfaction of basic human needs.

There are two ways in which the environment affects human health. First is directly through pollutants discharged by industries into the air and water by automobiles. Human health is also affected by the quality of environment at the place of work [3].

The deterioration of environment such as existence of stagnant water pools in villages provides fertile ground for breeding of vectors. Malaria which was once thought to have been eradicated, has reached endemic proportions in many parts of country [4].

Unhygienic living conditions and lack of awareness especially in rural areas has also contributed to the spread of other communicable disease like tuberculosis and cholera. It has become abundantly clear that improving environmental conditions should form an important part of healthcare, because curative care alone will not suffice

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as more succumb to these diseases. A full understanding of health requires that humanity be seen as a part of an ecosystem. The human ecosystem includes in addition to the natural environment, all the dimensions of the man-made environment-physical, chemical, biological and psychological; in short our culture and all its products. Disease is embedded in the ecosystem of man. Health, according to ecological concepts, is visualized as a state of dynamic equilibrium between man and his environment.

Rural people in India in general and tribal population in particular, have their own beliefs and practices regarding and cure of diseases. Some tribal groups still believe that a disease is always caused by hostile spirits or by breach of some taboo. They, therefore, seek remedies through magicoreligios practices. On the other hand, some rural people have continued to follow rich, undocumented, traditional medicine system.

The present study was carried out in four villages of Gwalior district with main objective being to assess the health status and family history of the people residing in the village. Health related problems amongst the villagers are quite acute. These problems are due to their erratic life style, poor sanitation and bad environmental condition prevailing in the village.

General Description of the Study Area

Study Area: The present study was conducted in Gwalior city, situated in the northern province of Madhya Pradesh [India] at Latitude 26° 22' N and Longitude 78°18' E, having total area of 5214km^2. It has an average elevation of 197m [646 ft]. The climate of Gwalior region may be described as composite with hot and dry summers, hot and humid rainy season and short autumns and winters. Mean maximum temperature in summers is 33°C, with the highest maximum of 48°C and mean minimum temperature in winters is 18.5°C with the minimum range of 1-3°C [5]. The sampling sites for the study were Sirol, Rayru, Padampur and Nayagaon villages of Madhya Pradesh. These sites were selected based on random sampling technique.

MATERIALS AND METHODS

The present study was carried out in different villages of Gwalior district of State Madhya Pradesh, with main objective being to assess and observe the health status and family history of the people inhabiting the villages in Gwalior. In the present survey research administered survey or interviews were used to collect and gather information from the respondents.

Information and Data regarding various parameters, including health diseases, gender, educational status, annual income, addiction, immunisation, family planning were collected by personal interview with the respondents in their homes during random visits to the village. Blood groups were determined by antiserum method with the assistance of trained technician from Red Cross Society Gwalior. Blood pressures were measured by the oscillatory method with the help of Stethoscope and Sphygmomanometer. Altogether, 27, 25, 23, 24 families and a total of 125 males, 96 females; 92 males, 69 females; 119 males, 100 females and 99 males and 77 females were selected randomly from Sirol, Rayru, Padampur and Nayagaon respectively. This constitutes 10 % of the sample and information was collected by personal interview in their homes. 300 people were selected randomly from the total population belonging to different age groups and they were observed personally and interviewed, tested and measurable data by various tests and instruments respectively.

RESULTS AND DISCUSSION

It was clear that, villagers did not see rurality overall as a threat to their health. Macintyre *et al*. [6] defined the reputation of a neighbourhood as 'how areas are perceived by their residents, outsiders and service or amenity planners and providers. If health promotion practitioners characterize rural areas as 'high risk', focus on the occupational health threats of farming, or otherwise suggest that their view of an area is negative, this may be at odds with the views held by residents and create communication problems. Moreover, people who were interviewed relate most of the problems to the background pollution that is emanating from the Gwalior city.

Diabetes is a serious health problem in these villages. The scientific evidence is clear: that diabetes in these villages is largely a result of an introduced diet and shifting lifestyle. Poverty and remoteness of communities on the reservation contribute to the problem. Proper exercise or shifting towards their earlier village lifestyles *viz* producing fruits and vegetables, closer to home in an individual or community setting, fetching water from local rivers, caring for animals etc will reduce the burden. Gardening is a component of diabetes care but a multi-sectored approach involving agriculture, nutrition, health, policy-makers, community leaders, schools and individuals is required to make faster progress on curbing diabetes in the these villages [7].

Skin diseases are common among rural people worldwide and most of the researchers have correlated this disorder to underlying socio-demographic and hygienefactors. It is therefore recommended that regular skin examination is performed in rural areas in order to identify people with skin disorders and to help them to understand the importance of effective personal hygiene.It is often stated that overcrowding and poor living conditions favor the development of many skin diseases [8-11].

Tobacco use leads most commonly to diseases affecting the heart and lungs, with smoking being a major risk factor for heart attacks, strokes, chronic obstructive pulmonary disease [COPD] [including emphysema and chronic bronchitis] and cancer [particularly lung cancer, cancers of the larynx and mouth and pancreatic cancer]. It also causes peripheral vascular disease and hypertension among the rural population [12]. The rural population in Madhya Pradesh faces immediate health consequences, such as more shortness of breath, poorer levels of fitness and increased phlegm production. Targeting teens is particularly important because only 10% of adult smokers start after the age of 18years. Our findings suggest that the anti-tobacco actions that have decreased tobacco use nationally should incorporate strategies aimed at addressing tobacco use in rural settings. Because the rate of smokeless tobacco use was also found to be higher in rural areas, customizing anti-tobacco campaigns for rural youths to address the use of smokeless tobacco products may result in a larger decrease in the overall smoking rate in this population.

It has been found,that urinary tract infections occur more commonly in women than men in the rural settings. Pyelonephritis usually follows a bladder infection but may also occur from a blood borne infection and lack of hygienic conditions among rural areas of Madhya Pradesh. Urinary tract infections are the most common cause of hospital acquired infections in rural as well as in urban areas, accounting for approximately 40% [13]. The rates of asymptomatic bacteria in the urine increase with age from two to seven percent in women of child bearing age to as high as 50% in elderly women in care homes [14].

It is important to note that in the Northern India healthcare system, patients may contact a specialist without a referral from the primary care physician and severe cases could be lost. In rural areas of Madhya Pradesh, patients who are experiencing only minor symptoms are more likely to consult the local non-specialized physician, who visits their village, instead of travelling to healthcare centres or to distant urban specialized doctors. The possible explanations for the high rates of acidity may be found in the socio-cultural environment and the northern Indian diet.

The primary aim of decentralization is to increase the resource base for primary care, by shifting as many resources as possible from central to peripheral locations. A second aim is expand the 'decision making space' of middle and lower level managers, in order to increase the responsiveness of sub national authorities to local health needs and situations. It has been found that one of the most extensive levels of decision-making in an administrative sense [15]. In reality, however, there is evidence to suggest that decision-making often can be constrained in the devolved context by political priority setting of local authorities, which can sometimes be perceived by health managers to be in conflict with priority setting based on health needs. A third aim of decentralization is to enhance the efficiency and effectiveness of health services management through prompt and appropriate middle level management decision-making. This is consistent with some other international research, which has indicated that the introduction of devolution has been associated with the complication of efforts to construct a logical hierarchy of health services, mainly due to the existence of 'grey areas' of responsibility between system levels and the lack of preparation of middle level management to take on new roles [16,17]. A family support is also important in raising the health conditions of rural people as there is strong association between family support and health status of people [18].

Table 1: sex wise age groups of the study population in selected villages

	Sirol		Rayru		Padampur		Nayagaon	
Age Groups	Male	Female	Male	Female	Male	Female	Male	Female
0-9	23	16	20	12	22	22	16	12
10-19	43	22	27	18	29	22	26	18
20-29	21	26	14	12	27	20	25	20
30-39	9	6	13	12	13	13	10	05
40-49	14	13	09	08	10	12	06	12
50-59	4	5	07	03	9	2	16	10
More than 60	11	8	03	03	09	09	04	06
Total	125	96	92	69	119	100	99	77

Table 2: sex wise education status [%] of the study population

	Sirol		Rayru		Padampur		Nayagaon	
Education	Male	Female	Male	Female	Male	Female	Male	Female
Illiterate	20	37	30	34	23	41	27	31
Primary	19	11	23	10	42	36	30	16
Middle	17	10	16	15	21	14	22	15
High	25	7	11	7	14	4	10	7
Higher	13	7	8	1	14	2	7	4
Graduate	13	10	3	2	2	3	1	3
Post Graduate	4	1	1	0	3	0	2	1

The data is expressed as the percentage to the nearest figure

Table 3: sex wise addiction in the study population

	Sirol		Riru		Padampur		Nayagaon	
Addiction	Male	Female	Male	Female	Male	Female	Male	Female
Alcohol	13	05	08	0	10	00	12	1
Gutaka	13	05	06	0	17	05	12	1
Smoking	10	02	07	1	15	01	5	1
Tobacco	08	00	5	0	9	00	08	0

The data is expressed as the percentage to the nearest figure

Table 4: sex wise average blood pressure in the study population

	Sirol				Riru				Padampur				Nayagaon			
	Male		Female		Male		Female		Male		Female		Male		Female	
Age group in years	SP	DP	SP	SP	DP	SP	DP	SP	DP	SP	DP	SP	DP	SP	DP	SP
10-19	NA	NA	120	118	78	-	-	-	-	116	76	118	78	-	-	-
20-29	118	74	120	118	78	120	76	114	80	116	70	118	78	120	76	114
30-39	116	76	116	112	78	110	70	122	84	110	70	112	78	110	70	122
40-49	126	80	118	110	72	120	80	126	84	126	86	110	72	120	80	126
50-59	140	70	130	145	82	110	76	116	76	130	90	145	82	110	76	116
60 and Above	126	80	136	132	90	120	80	118	80	130	90	132	90	120	80	118

Table 5: Sex wise prevalence of different diseases/ symptoms in the study population

	Sirol		Rayru		Padampur		Nyagaon	
Disease [s]	Male	Female	Male	Female	Male	Female	Male	Female
Acidity	10	20	10	50	20	49	56	63
Allergy	14	25	07	05	16	41	13	14
Asthma	04	0	02	01	0	0	08	02
Mouth problems	13	07	06	08	8	6	18	02
Diabetes	0	0	01	01	02	1	02	03
Low Vision	06	01	05	06	7	5	12	08
Skin/VD	03	03	05	07	4	4	0	04
Tuberculosis	0	0	0	0	0	0	0	0
Urinogenital Problems	0	08	0	1	0	1	0	0

The data is expressed as the percentage to the nearest figure

CONCLUSIONS

The conducted survey created a new findings to form the basis of policy initiatives and a model of utilisation of health services by the residents of the rural villages of Gwalior district. The rural communities struggle with maintaining healthcare services, supporting the rural health care safety net is critical. The mentioned factors are among the most significant barriers to equitable care and must be addressed in order to eliminate healthcare disparities, particularly among rural People. Through innovative strategies such as bringing health care to the community via a mobile medical clinic, inter-agency collaboration, involvement of students in the program and utilization of programs for information, referrals, support and lay education will make a positive impact on rural people of Madhya Pradesh. Women especially in the village need to be empowered in areas of income generation, education and their role in social uplifment to enable them access to health services. Health facilities must be equally distributed to ensure equal physical access. Rural development needs focus on methods that lead directly to sustainable programmes to promote the health of rural community. Improving rural health requires innovative, creative and integrative strategies that address both individual health related behaviours and many social determinants of health. It is imperative for any planning effort to think beyond health care services to the more multifaceted social conditions that impact health.

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