A SURVEY ON HEALTH STATUS OF RURAL POPULATION AT HAZRATPUR UNION, KERANIGONJ THANA, BANGLADESH

Sultana, S.*; Brishti, S.A.; Jahan, F.I.

Department of Pharmacy, Daffodil International University, Dhaka, Bangladesh.

* sharifa@daffodilvarsity.edu.bd

Abstract

Health is a basic requirement to improve the quality of life. A national economic and social development depends on the state of health. The main objective of the present study was to find out the health status of rural population of Bangladesh and for these reason seven villages of Hazratpur union, Keranigonj Thana was chosen as it provides an ideal research setting. The study explores people's participation in health services through personal interview with structured questionnaires. Data analyzed by using SPSS 20.0. The study reveals that there is a correlation between sanitation system and GI related disorder. People with poor sanitation facing more GI related disorder than the people having ideal sanitation. Older population is more vulnerable to diseases. From the study we found 45% aged people are affected by multiple diseases. There is a correlation between age and cardio vascular diseases at 10% significance level. 20% population with more than 35 years is affected by cardio vascular diseases. So poor sanitation threatens public health of rural population. Improved sanitation contributes enormously to human health and well-being.

Key words: Rural, Sanitation, vulnerable, SPSS.

Introduction

Bangladesh is a developing country of South Asia, located on the northern shore of the Bay of Bengal. It is the most densely populated and poorest country in the world, where 50% of the population lives on less than US$ 1.25 a day (1). However, the poverty levels in the country were over 70 percent in the 1970s and in 2000 this reduced to 40 per cent (2). More than three-quarters of Bangladeshis - over 115 million people - live in rural areas (3), among them 29% male and 27% female of 15-24 years of age are illiterate (1). Education has a significant effect on participation in health services and administrative factors could play a significant role in increasing the people's participation in Bangladesh's health sector. The health service functions were initially restricted to curative services. With the development of modern science and technology, health services emphasize promotive and preventive rather than curative health care. Yet, a large number of people of Bangladesh, particularly in rural areas, remain with no or little access to health care facilities (4).

Health reflecting the soundness of physical condition essentially measures the quality of human life. A national economic and social development depends on the state of health. Poor sanitation practices have dire health impacts. Diarrhea, typhoid and other diseases are spread by bacteria in feces. In rural areas, only 32 per cent latrines meet the international standards (5). Although access to sanitary latrines continues to be a problem, improvements have been made in terms of people's sanitation behaviors (6). Convincing people to defecate in an ideal facilities are the first step in sanitation improvement (7). Contaminated water can also cause many types of diarrheal diseases, including Cholera, and other serious illnesses such as Guinea worm disease, Typhoid, and Dysentery. Water related diseases cause 3.4 million deaths each year (8). According to the UNFPA country profile of Bangladesh, in 2006 around 36% population had access to improved sanitation and 80% access to improved drinking water supply. Despite day by day increasing concern in the environment and human health, around 4 billion cases of diarrhea are reported in the world each year, killing some 2.2 million children under the age of five because of lack of access to adequate water and sanitation services (9). In the developing countries over five million children aged between 0-14 years die every year due to various disease such as malaria, dengue, acute respiratory infections and diarrhea which are preventable and emanated from

the poor environmental services (10). This study aims to explore the health status of rural population of Bangladesh. This is done using some key indicators, namely economic and educational status, sanitation facilities, commonly occurred diseases etc. The study explores people's participation in health services through personal interview and other secondary data.

Methods

A baseline survey was done for 15 days period in the month during December 2015 to January 2016. Both primary and secondary data were used in this study. Data were collected from the local people from 7 villages of Hazratpur Union Parishad which is situated at Keranigonj thana of Dhaka District (11). A structured questionnaire was provided to 84 people for face-to-face interviews. All participants were well informed about the nature of the study and verbal informed consent was taken from them.

The questionnaire consisted of several parts. At first, demographic data like the age, address, gender, profession, level of education were included in the questionnaire. Then respondents were asked about major illness occurring within 1 month prior to the survey. Questionnaire contained questions to relate age to the disease occurred to them. Moreover, the trend to seek doctors' advice when they fell sick was also found out through question to relate with the health facilities existing in the area. Question was asked about the sanitation facility to relate with the GI disorder which is a common disease in the rural area. The respondents' data were compiled, processed and then basic descriptive and comparative analysis was carried out by SPSS Statistics software 20.0. At first demographic profile were processed and categorized according to age, gender and education level of the interviewed people. Then the respondents were categorized on the basis of overall disease pattern. Chi-square test was used to calculate the p value to find out the significances among the correlations between various factors. Various secondary sources like books, journals, project reports, project documents, unpublished reports, news reports , internet are also used for this study.

Results and Discussion

In this study we found that among the rural population of the study area, majority of the people were of above 35 years old (48.8 %). 30.5 % people were within the age range of 21-35 year and 18.3 % people were within 13-20 year (Fig-1). Only 2.4% respondents were within the age range of 0-12

years. Among the respondents 62.2% were male while 37.8% were female (Fig-2). Most of the respondents' education level (54.7%) was below SSC. 24% respondents passed SSC and 8% passed HSC examination. 12% students were of Honors' level while 1.3% respondent reside to other educational qualification (Fig-3).

Here we found that rural population of the study area were mostly affected by GI related disorder. About 13% patient suffered from GI related disorder among 13 diseases (Fig-4). It has been found that 69.5 % of the respondents seek doctors' consultancy prior to medication while 30.5% of them still take medication without consultancy (Fig-5). 39% respondents seek treatment from Government Hospital while 37% from private clinic and 24% from other facilities like pharmacy, private practitioners etc.(Fig-6).There is a correlation between sanitation system and GI related disorder at 5% significance level. Here we found 27.4% population was affected GI related disorder having ideal sanitation where as 75% were affected who has no proper sanitation (Table-1).

Aged population is more vulnerable to diseases. From the study we found 45% aged people are affected by multiple diseases where as people with age range below 12 years are affected by single disease (Table-2). There is a correlation between age and cardio vascular diseases at 10% significance level. 20% population with more than 35 years is affected by cardio vascular diseases (Table-3).

Conclusion

Rural people of our country face a lot of challenges and problems regarding health system. From the study we can see that majority of the people go to Government hospitals to seek treatment while still a large number of people have to go to private clinic, private practitioners and pharmacies. The facilities in the Government Hospitals need to increase so that all people can get expected healthcare from there. Though most people seek consultancy prior taking any medication but consciousness need to be increased so that the

dangerous effect of taking medication without consultancy can be avoided. There prevailed an inter-linkage between health and poor sanitation. Government should take steps to increase mass awareness as well as provide facility for ideal sanitation. NGOs and other organizations should come forward in this regard also. However, this study was done in a small scale. To get the real picture further large scale study is necessary.

References

1. UNFPA. Country Profiles for Population and Reproductive Health: Policy Developments and Indicators 2009/2010. *Available*   *from:* https://www.unfpa.org/sites/default/files/pub-pdf/countryprofiles_2010_en.pdf
2. Kabeer N, Mahmud S. Globalization, gender and poverty: Bangladeshi women workers in export and local markets. J Int Devel 2004;16:93–109.
3. Bangladesh Bureau of Statistics. Population census 2001: preliminary report. Dhaka: Ministry of Planning, Government of Bangladesh; 2001.
4. Islam MS, Ullah MW. People's participation in health services: A study of Bangladesh's rural health Complex. Bangladesh development research center (BDRC); 2009 Jun 1.
5. *"WHO | Global Health Observatory Data Repository". Retrieved 14 February 2016.*
6. Akter T, Ali AR. Factors influencing knowledge and practice of hygiene in Water, Sanitation and Hygiene (WASH) programme areas of Bangladesh Rural Advancement Committee. Rural Remote Health. 2014 Aug 19;14:2628.
7. Bangladesh Health and Injury Survey 2004.
8. "Waterborne Diseases", *Available from-* http://www.vestergaard.com/global-challenges/waterborne-diseases
9. Franceys R. (2001), Public Private Community Partnerships in Urban Services for the Poor Theme Paper: Water, Sanitation and Solid Waste, Asian Development Bank, Available *from-* http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=0FA4F64C2F6B617AD1167A228195B44B?doi=10.1.1.197.3982&rep=rep1&type=pdf
10. Gopalan HN. Environmental health in developing countries: an overview of the problems and capacities. Environmental health perspectives. 2003;111(9):A446.
11. Farooque, Hasan MA. "Keraniganj Upazilla" In Islam, Sirajul; Jamal, Ahmed A. Banglapedia: National Encyclopedia of Bangladesh (Second ed.). 2012. Asiatic Society of Bangladesh.
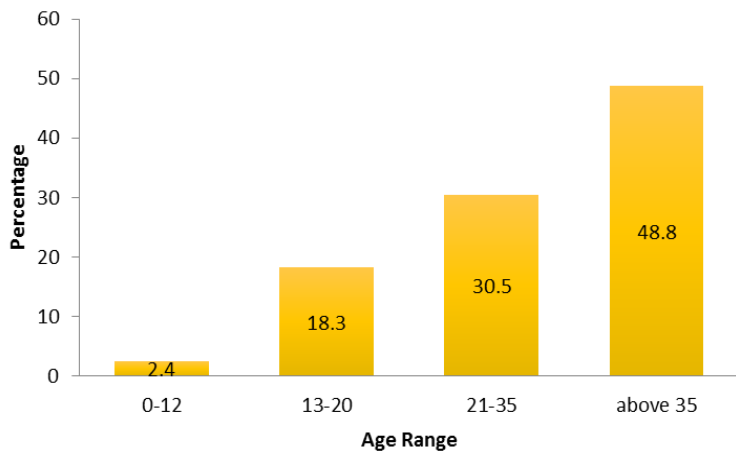
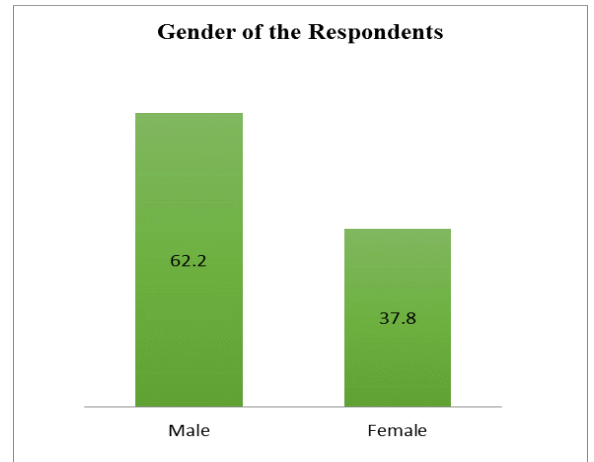**Figure 1.** Percent of People of different Age group
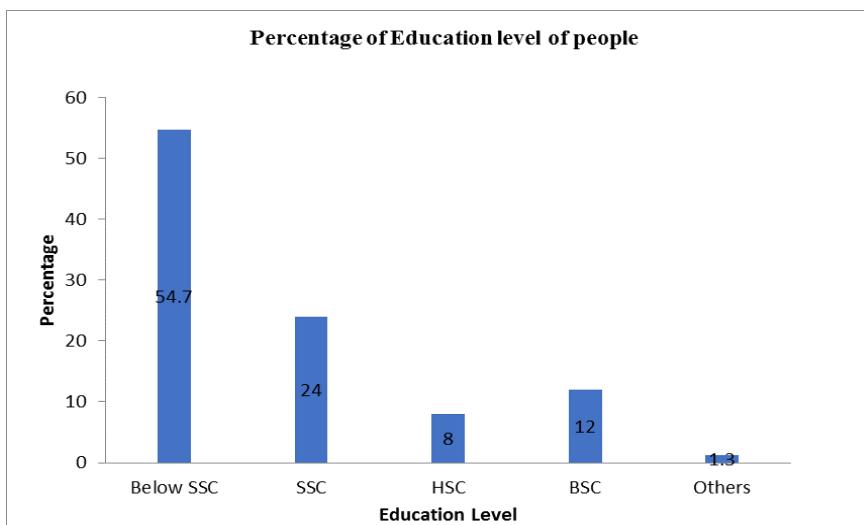

Figure 2. Gender of the Respondents
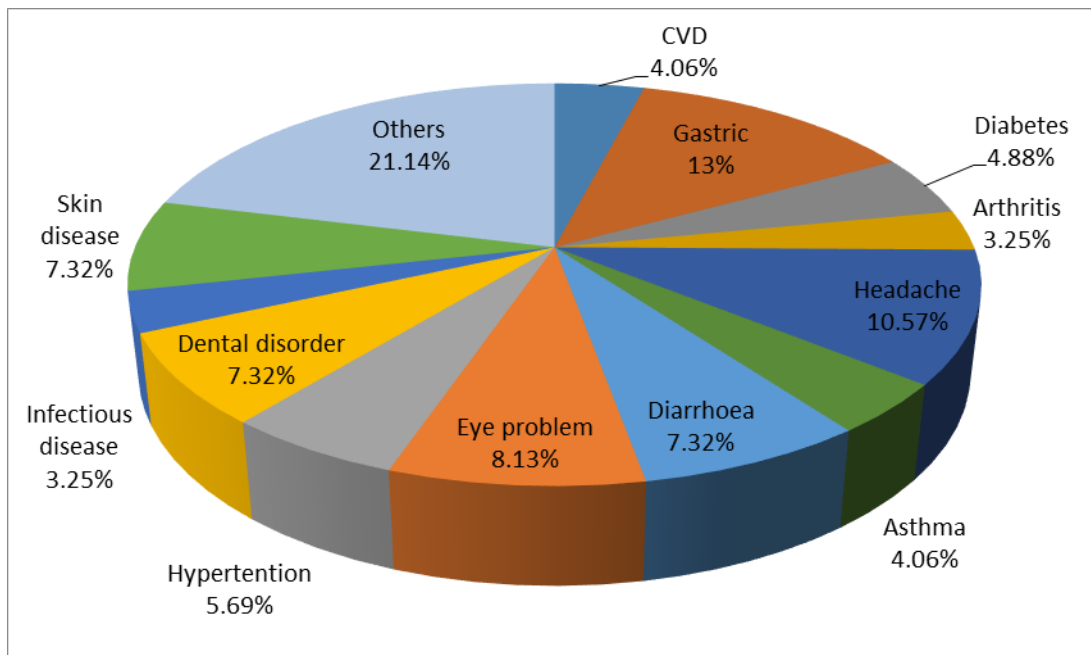

Figure 3. Education level of people

Figure 4. Percentages of different disease of rural population
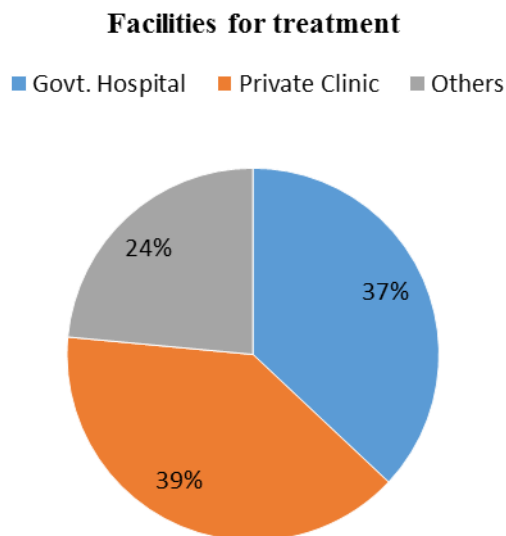
Facilities for treatment

■ Govt. Hospital   ■ Private Clinic   ■ Others

Figure 6. Treatment Facilities

Table 1. Correlation between Sanitation and GI related disorder

		GIT			Chi-Square
		yes	no	Total	
Sanitation system	Ideal	17(27.4%)	45(72.6%)	62(100.0%)	0.045 with df 1*
	others	15(75.0%)	5(25.0%)	20(100.0%)	

*Correlation at 5% significance level

Table 2. Correlation between Age and number of occurring disease

		Do you have any disease			Chi-Square
		one	multiple	Absent	
Age of respondents	0-12	2(100.0%)	0(0%)	0(0%)	5.166 with df 6
	13-20	12(80.0%)	3(20.0%)	0(.0%)	
	21-35	15(60.0%)	9(36.0%)	1(4.0%)	
	above 35	21((2.5%)	18(45.0%)	1(2.5%)	

*Correlation at 10% significance level