

Socioeconomic Profile and Health Status of Rickshaw Pullers in Rural Bangladesh

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Abstract

The cross-sectional study was carried out in a rural statistical subdivision (i.e. Hugra union under Tangail Sadar police station at Tangail district) in Bangladesh. The objectives of the study were to assess the socioeconomic as well as the health and nutritional condition of the concerned area abiding in rickshaw pullers. The data analysis showed that 72% respondents earned BDT 300-400 where as only 6% the BDT 500 earners on daily basis. There were found 22% respondents in underweight and 6% in high risk of overweight at their dwelling topographic sites in Tangail district. About 28% respondents were cough and cold, 18% diarrhoea and 10% asthma and gastric ulcer sufferers according to the study. An intercession is essential to turn tail their devastating health and nutritional plight.

Keywords

Health and Nutrition, Rickshaw Pullers, Underweight, Tangail District, Socioeconomic Profile, Bangladesh

Received: May 22, 2016 / Accepted: June 12, 2016 / Published online: June 18, 2016

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1. Introduction

The word “Rickshaw” originates from the Japanese word “Jinrikisha”, which literally means human-powered vehicle [1]. Rickshaws originally developed in Japan in the late 1860s [2], represented a clear technological advancement on its major predecessor, the Sedan chair. It came into view in Shanghai in 1873 [3, 4] and became the predominant mode of short distance individual mode of transport by the early 1900s [5]. Rickshaws have been used as a means of transportation for social elite but, they play a pivotal role in the transport system, especially in the towns and cities of the third world countries, where, the streets connecting the roads are very narrow on which motor vehicles cannot be easily driven. Probably they are

the only transport system to provide point to point travel [6]. Rickshaw pullers are the most disadvantageous section of the people [7-9] who are engaged in transportation activities for getting their means of livelihood, because pulling of rickshaw is a menial and hazardous occupation [10]. Despite the engagement of the rickshaw pullers either in waiting for the passengers/commodities or in pulling the rickshaws to carry the passengers and the commodities from one place to another from early morning to late evening or in whole night and even, sometimes, round the clock, they are not in position to earn the needed amount of money to fulfil their basic needs of life. Cycling on an empty stomach is a

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common experience among them. The vulnerability of rickshaw pullers further accentuated by the fact that the majority of those who ride rickshaws are not owners as well as there is constant struggle and increased competition among the rickshaw pullers. The work is arduous and the living condition is shoddier. People who belong to lower segment of the society, their deterioration continue day by day particularly in rural masses where more than 70% population resides. Unemployment, illiteracy, unhygienic health conditions and discrimination regarding distribution of resources and assets is common [11-14]. Pulling a rickshaw may have been, it offered an income better than that available in the villages [15], because urban rickshaw pullers come from a very poor economic background consistent with the characteristics of chronic poverty [16], thereby most of them migrate to cities from rural areas in search of employment for getting better means of livelihood [17], but in reality their expectations are rarely realized [18]. After arrival in cities, they subsist on very little as they try and save money as much as they can to send back to their families in their villages and live a miserable life where their extent of accessibility in housing, electricity, water and other amenities is very poor [19, 20]. These deprived and exploited sections are not explicitly recognized in policy documents by the government [21-23] and very little attention has been paid in humanizing the livelihood of the rickshaw pullers [24] and therefore, necessary to collect relevant information to study the socio-economic composition, causes, problems and the implications of such occupation on the health and overall life of the rickshaw pullers, which could be brought before the society and appropriate policies may be framed to solve their problems.

2. Materials and Methods

This epidemiological survey was conducted to find out the prevalence of disease, under nutrition, over nutrition and hygienic condition of rickshaw pullers using a formula by Krejcie and Morgan (1970) [25] within 50 respondents in the study. However the respondents with 21 to >60 years were asked to collect data using simple random sampling technique during the period of January 2015 to August 2015. The anthropometric measurements were taken three times and following standards protocol [26]. Anthropometric measurements taken were weight, height and the BMI. The instruments that were used for

anthropometric measurements were digital weighing scale, stadiometer as well as measuring tape. A questionnaire that was modified from several studies was used to collect data. The questionnaire basically asked to obtain relevant information on anthropometric, socio-economic and demographic information etc.

3. Results

A descriptive cross sectional study was carried out socio economic profile, health and nutritional plight in selected rickshaw pullers. The salient feature of this study is presented in the following:

3.1. Socio-demographic Data

A descriptive cross sectional study was carried out 50 rickshaw pullers from the randomly selected Hugra union in Tangail district, the significant rural area at in Bangladesh.

Table 1 represented the percentage distribution of age group. The proportion has been recorded 32% (n=16) in 31-40 age-group, 13% (n=13) in 41-50 age-group, 22% (n=11) in 51-60 age-group and only 3% above 60 years of age. However, 7% of rickshaw pullers were teenagers. The percentage distribution of average daily income earned by rickshaw pullers was also seen in this section. An analysis of data given in table 1 shows that 12% (n=6) rickshaw pullers earned per day 200-300 BDT, 72% (n=36) 300-400 BDT, 10% (n=5) 400-500 BDT but only 6% get more than 500 BDT. This also shows that percentage distribution of causes of rickshaw pulling as unemployment 23%, poverty 18%, unskilled 10%, low income 11%, large size of family 9%, Illiteracy 8%, cash payment 6%, debt and uncertainty in production of crops, 2%, early marriage 3%, family disintegration 2%, small size of land holding 2%, desire for work /self respect 3% and migration 3%.

The marital statuses of rickshaw pullers were 94% married and 6% unmarried but nowidowers. About 64% was access electricity & 36% no use access electricity. On the other hand about 82% wrist watches, 46% mobile, 68% television, 14% cycle & 20% radio. The distribution of receiving load from different NGOs for different purpose that 15% trade, 11% treatment, 13% marital purpose, 3% land purchase and 8% others. This table 1 show that, 90% faced lack of rickshaw stands, 20% faced the problem like unsatisfactory fare and rude behaviors of passengers with them. While 14% had the problem of weakness and 7% reported about the inconvenience in issuance of license.

Table 1. Socio-demographic characteristics of the respondents (N=50).

Parameters	Frequency	Percentage
Age group distribution		
Age group (years)		
21-30	7	14%
31-40	16	32%
41-50	13	26%
51-60	11	22%
>60	3	6%
Distribution of average daily earning		
Daily earning (BDT)	Frequency	Percentage
200-300	6	12%
300-400	36	72%
400-500	5	10%
More than 500	3	6%
Distribution of causes of rickshaw pulling.		
Causes		Percentage
Unemployment		23%
Poverty		18%
Unskilled		10%
Low income		11%
Large size of family		9%
Illiteracy		8%
Cash payment		6%
Debt and uncertainty in production of crops		2%
Early marriage		3%
Family disintegration		2%
Small size of land holding		2%
Desire for Work /self respect		3%
Migration		3%
Distribution of marital status		
Status	Percentage	
Married	94%	
Unmarried	6.0%	
Widower	0	
Distribution of access to electricity		
Response	Frequency	Percentage
Yes	32	64.0%
No	18	36.0%
Distribution of durable goods		
Goods	Percentage	
Wrist watch	82%	
Radio	20%	
TV	68%	
Cycle	14%	
Mobile	46%	
Distribution of receiving loan		
Reasons	Frequency	
Trade	15	
Treatment	11	
Marital purpose	13	
Land purchase	3	
Others	8	
Distribution of problem faced		
Problems	Percentage	
Lack of rickshaw stands	90%	
Unsatisfactory fare	20%	
Weakness	14%	
Problem of incense	7%	

3.2. Health Status, Educational Background and Anthropometric Information

The figure 1 shows that about 22% (n=11) rickshaw pullers were underweight, 72% (n=36) normal range & 6% (n=3) high risk of overweight but no obese persons.

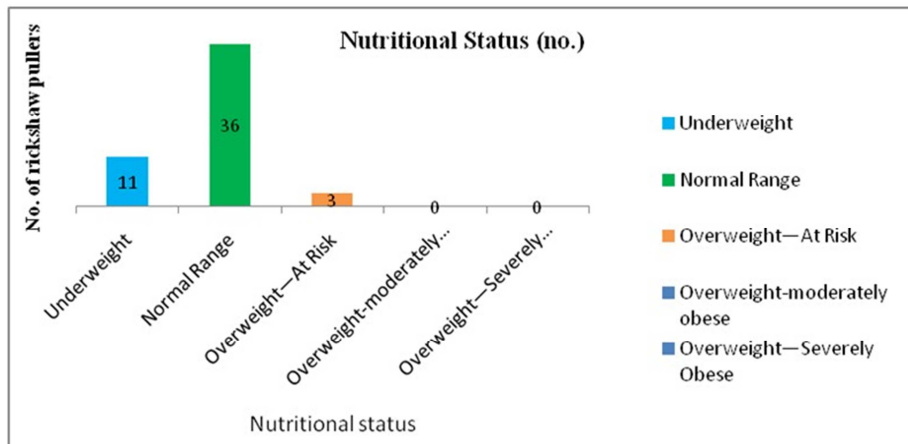


Figure 1. Nutritional status of rickshaw pullers.

The analysis of figure 2(a) shows that, out of 50 rickshaw pullers only 4% were educated, 80% not educated and 16% self educated. On the other hand figure 2(b) also shows that about 94% smokers, 20% drinkers, 22% gamblers and 4% no bad habits.

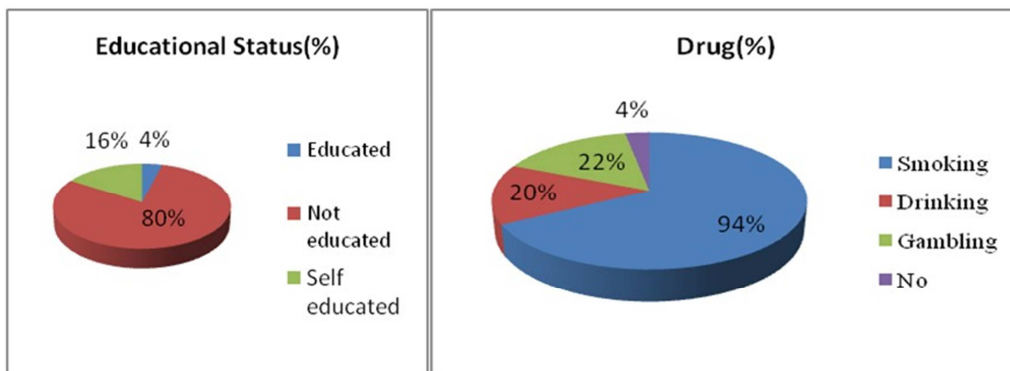


Figure 2. Educational status (a) and distribution of drug practices (b).

The figure 3 (a) shows that about 28% coughed and cold, 22% joint, 21% back and 20% chest pains. In addition, 10% asthma, 4% tuberculosis and only 2% blood pressure. On the other hand figure 3 (b) also shows 44% quack/village health workers, 28% purchase medicine without doctor's advice, 9% MBBS, 4% NGOs health center, 9% do not take treatment and 5% others.

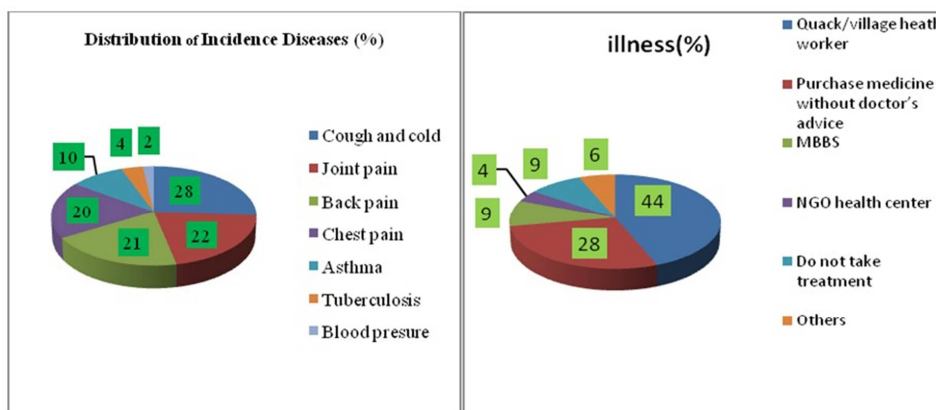


Figure 3. Distribution of incidence diseases (a) and illness (b).

The figure 4(a) shows that 84% respondents used tubewell, 12% piped water and 4% others. On the other hand the figure 4(b) also showed about 36% used sanitary, 32% ring slab, 24% kacha latrine and 8% others.

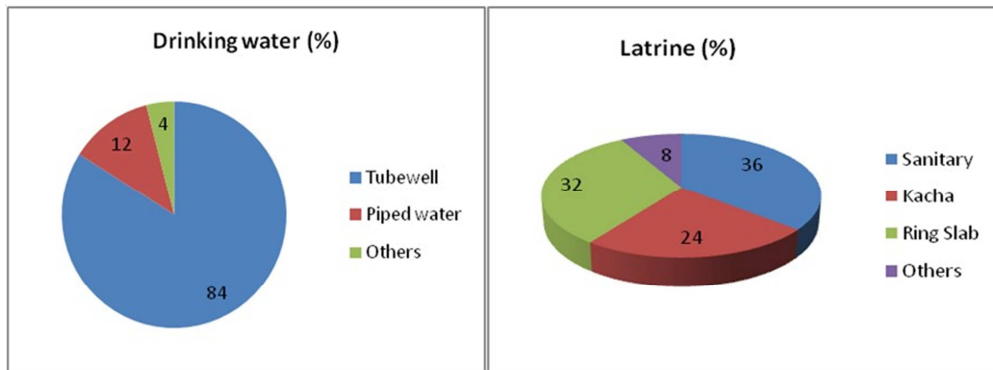


Figure 4. Distribution of drinking water (a) and Distribution of latrine used (b).

Figure 5 shows that the rickshaw pullers were suffered from different diseases while 13% fever (influenza), 18% diarrhoea, 10% gastric ulcer, 19% malnutrition, 14% ENT, 11% skin disease, 9% pneumonia & 6% others.

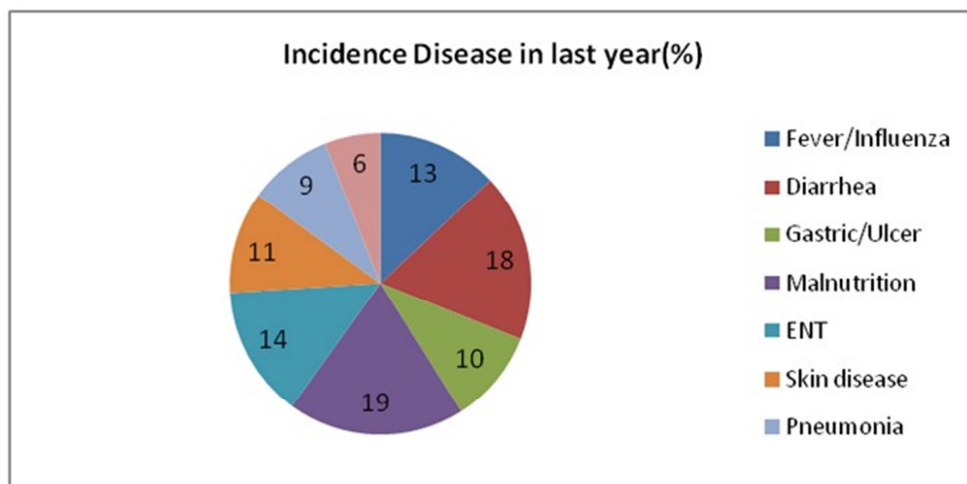


Figure 5. Distribution of incidence of diseases in last year.

Figure 6 showed that rickshaw pullers were consuming meat by 12 rickshaw pullers, milk by 5 rickshaw pullers and none milk and meat by 33 rickshaw pullers for last a month.

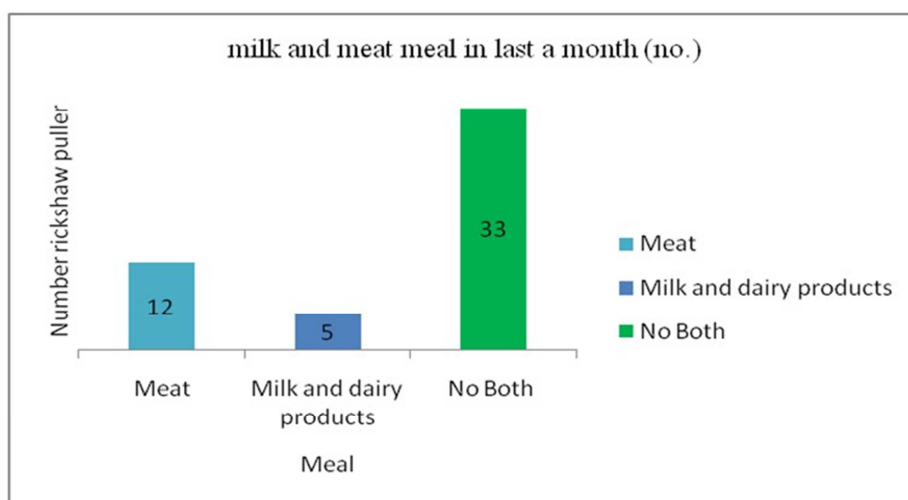


Figure 6. Distribution of Milk and meat as meal in last month.

4. Discussion

The poor people who enter in the rickshaw pulling sector normally has no saving of cash money. So in any need of money they have to borrow from the unauthorized lenders in high interest rate. A large number of them start life of rickshaw pullers to repay their debt. The data analysis the 7% rickshaw pullers were teenager and the socio-economic causes [27, 28] which compelled the poor people to engage themselves in rickshaw pulling. Unemployment, poverty, low income and small size of land holdings are the major economic causes which forced to about 61% of the rickshaw pullers to involve themselves in the rickshaw pulling, whereas among the social factors, large family size, illiteracy, early marriage, family disintegration and migration pushed to 25% of them to pull rickshaws [29, 30]. Moreover, unskillness, cash payment, debt and uncertainty in production of crops, desire of work/self respect derived 21% of the rickshaw pullers towards the pulling of the rickshaws [31]. The anthropometric data (weight and height), in this study were 22% underweight, 72% normal range and 6% high risk of overweight but no obese persons [32, 33]. In the additional data analysis of 50 rickshaw pullers were 4% educated, 80% not educated & 16% self educated [34]. On the other hand about 94% smokers, 20% drinkers, 22% gamblers and 4% no bad habits [35]. About 28% rickshaw pullers were coughed and cold, 22% joint, 21% back and 20% chest pains. In addition, 10% asthma, 4% tuberculosis and only 2% blood pressure. On the other hand about 44% quack/village health worker, 28% purchase medicine without doctor's advice, 9% the MBBS, 4% NGOs health center, 9% do not take treatment and 5% others [12, 36-38]. The dietetic tool 1/n nutrition counselling by name can be an effective measure to chick bid for their sound health [39-41].

5. Conclusion

The overall analysis of the study revealed that the rickshaw pullers are one of the poorest sections of the society living in abject poverty but play a pivotal role in transportation system. Neither their working environment regulated nor their social security issues are addressed. In rickshaw-pulling neither there are need to invest money nor to have any special skill to drive it. So the stakeholders should take immediate intervention to solve their problems. The government and the NGOs should organize different campaigning to aware them about health, hygiene and sanitation issues to lead them a healthy life.

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