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Socio economic profile of selected rickshaw puller at hugra union in tangail district, Bangladesh

Abstract

A descriptive cross-sectional study was carried out 50 rickshaw puller (n=50) in selected rural area (Hugra Union) in Tangail District. The major objective of this study was to assess the socioeconomic information, health status and nutritional knowledge of rickshaw pullers. The data analysis the 7% rickshaw pullers were teenager and the socio-economic causes about 61% of unemployment, poverty, low income and small size of land holdings whereas among the social factors, large family size, illiteracy, early marriage, family disintegration and migration pushed to 25% of them to pull rickshaws. 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. The highest income of rickshaw pullers were 72% earned between BDT 300-400 per a day, but only 6% get more than BDT 500 in a day. About 64% was access electricity of rickshaw pullers & 36% no access electricity. On the other hand about 82% were wrist watches, 46% mobile, 68% television, 14% cycle, 20% radio. The receiving load from 15% trade, 11% treatment, 13% marital purpose, land 3% purchase and 8%.others. About 90% faced lack of rickshaw stands, 20% rickshaw pullers faced the problem like unsatisfactory fare and rude behaviors of passengers with them. Anthropometric indices of weight-for- height (WHZ) and Body Mass Index (BMI) for age were used to estimate the rickshaw pullers nutritional status. It was found for WHZ in rural area that 22% rickshaw pullers were severely underweight & 6% severe overweight and there were no moderately obese and severely obese. 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 heath worker, 28% purchase medicine without doctor's advice, 9% MBBS, 4% NGOs health center, 9% do not take treatment and 5% others. The 50 rickshaw pullers were using about 84% tube well, 12% piped water & 4% other on the other hand 36% sanitary, 32% ring slab, 24% kacha and 8% others. Height and weight are the most commonly used measures, not only because they are rapid and inexpensive to obtain, but also because they are easy to use. The anthropometric data (weight and height), in this study were 22% underweight, 72% normal range & 6% high risk of overweight but no obese persons. In the additional data analysis of 50 rickshaw pullers were 4% educated, 80% not educated & 16% self educated. On the other hand about 94% smokers, 20% drinkers, 22% gamblers and 4% no bad habits of rickshaw pullers. 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 heath worker, 28% purchase medicine without doctor's advice, 9% MBBS, 4% NGOs health center, 9% do not take treatment and 5% others. The 50 rickshaw pullers were using about 84% tube well, 12% piped water & 4% other. About 36% sanitary, 32% ring slab, 24% kacha and 8% others. The rickshaw pullers were suffered from different diseases where were 13% fever (influenza), 18% diarrhea, 10% gastric ulcer, 19% malnutrition, 14% ENT, 11% skin disease, 9% pneumonia & 6% others. For BMI for age (BAZ), the results from this survey. As most of the rickshaw pullers were socio economic condition and health status severely poor, it should be provided community education concerning about nutritional knowledge, environmental sanitation and personal hygienic practices and nutritional deficiency diseases, nutritional value of food and dietary practices would perhaps overturn the trends. The difference results between these studies might be due to average expenditure for food, habit frequency, marital status, nutritional status, socio-economic status and geographical condition.

Keywords: rickshaw pullers, socio-economic status, health status, marital status & educational status

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Introduction

The word rickshaw originates from the Japanese word 'jinrikisha', which literally means human-powered vehicle.[1–3] Rickshaws originally developed in Japan in the late 1860s,[4] represented a clear technological advancement on its major predecessor, the Sedan chair. It came into view in Shanghai in 1873[5,6] and became the predominant mode of short distance individual mode of transport by the early 1900s.[7] In Bangladesh, the term rickshaw usually refers to a rickshaw. No one can see them plying in virtually all elite colonies of big cities of the country.[8]

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.[9] Rickshaw pullers are the most disadvantageous section of the people 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 fulfill their basic needs of life. Cycling on an empty stomach is a 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.[11,12]

Pulling a rickshaw may have been, it offered an income better than that available in the villages,[13] because urban rickshaw pullers come from a very poor economic background consistent with the characteristics of chronic poverty,[2] thereby most of them migrate to cities from rural areas in search of employment for getting better means of livelihood,[14] but in reality their expectations are rarely realized.[10] 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. These deprived and exploited sections are not explicitly recognized in policy documents by the government and very little attention has been paid in humanizing the livelihood of the rickshaw pullers.[15] It is, 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.[16–21]

Material and methods

The study was a descriptive cross-sectional study, which was focused on socio economic status & nutritional status in rickshaw puller in selected rural area (Hugra Union) in Tangail District, Bangladesh. This epidemiological survey was conducted to find out the prevalence of disease, under nutrition, over nutrition and unhygienic condition of rickshaw puller. Using a formula by Krejcie & Morgan,[22] 50 participants (n=50) in the study. However, 50 participants (n=50) were collected simple random sampling technique. The study population was aged 21 to >60 years. The data collection begins from January 2015 to August 2015.

The anthropometric measurements were taken three times and following standards protocol.[23] Anthropometric measurements taken were weight, height and Body Mass Index (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 (health, condition etc).

Result

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

Demographic data

A descriptive cross sectional study was carried out 50 samples, rickshaw pullers selected randomly from rural area at Hugra Union in Tangail District.

Table 1 presents 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. An analysis of data given in Table 1 shows that 12% (n=6) rickshaw pullers earned taka 200-300 per day, 72% (n=36) gained between 300-400 taka in a day, 10% (n=5) get taka 400-500 but only 6% get more than 500 in a day. This Table 1 shows that percentage distribution of causes of rickshaw Pulling. The unemployment 23%, poverty 18%, unskilled 10% low income11%, 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 status of rickshaw pullers was 94% married and 6% unmarried but no widowers. About 64% was access electricity of rickshaw pullers & 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, land 3% purchase and others 8%. This Table 1 shows that, 90% faced lack of rickshaw stands, 20% rickshaw pullers 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).

Health status, educational status and anthropometric information

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

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

The Figure 3a shows that 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 Figure 3b shows 44% quack/village heath worker, 28% purchase medicine without doctor's advice, 9% MBBS, 4% NGOs health center, 9% do not take treatment and 5% others.

The Figure 4a shows that rickshaw pullers were using about 84% tubewell, 12% piped water & 4% other. On the other hand the Figure 4b shows about 36% sanitary, 32% ring slab, 24% kacha and 8% others.

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Table 1 Demographic Profile of Socio economic in Rickshaw pullers (Sample Size, n=50)

Parameters		
Distribution of age group rickshaw pullers		
Age group	**No.**	**Percent**
21-30	7	14%
31-40	16	32%
41-50	13	26%
51-60	11	22%
>60	3	6%
Distribution of average daily income		
Daily Income (taka)	**No.**	**Percent**
200-300	6	12%
300-400	36	72%
400-500	5	10%
More than 500	3	6%
Distribution in causes of rickshaw pulling		
Causes		**Percent**
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%

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Table continued...

Parameters		
Distribution of marital status		
Status	**Percent**	
Married	94%	
Unmarried	6.0%	
Widower	0	
Distribution of access to electricity		
Response	**No.**	**Percent**
Yes	32	64.0%
No	18	36.0%
Distribution of durable goods		
Goods	**Percent**	
Wrist watch	82%	
Radio	20%	
TV	68%	
Cycle	14%	
Mobile	46%	
Distribution of receiving loan		
Reasons	**No.**	
Trade	15	
Treatment	11	
Marital purpose	13	
Land purchase	3	
Others	8	
Distribution of problem faced		
Problems	**Percent**	
Lack of Rickshaw stands	90%	
Unsatisfactory fare	20%	
Weakness	14%	
Problem of License	7%	

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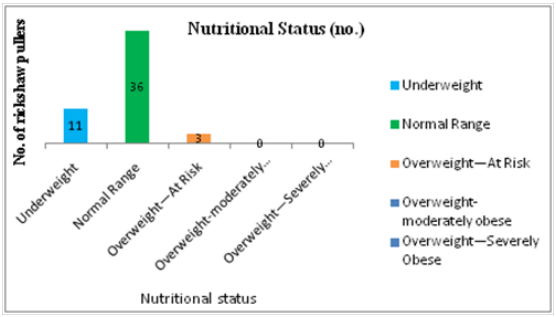

Figure 1 Nutritional status of rickshaw pullers.

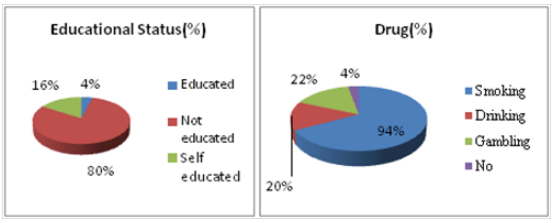

Figure 2 (a). Educational status & (b). Distribution of drug practices.

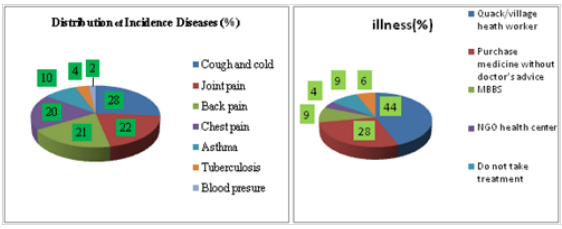

Figure 3 Distribution of incidence diseases (a) & illness (b).

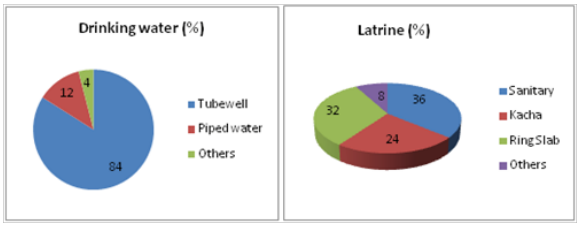

Figure 4 Distribution of drinking water (a) & Distribution of latrine used (b).

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

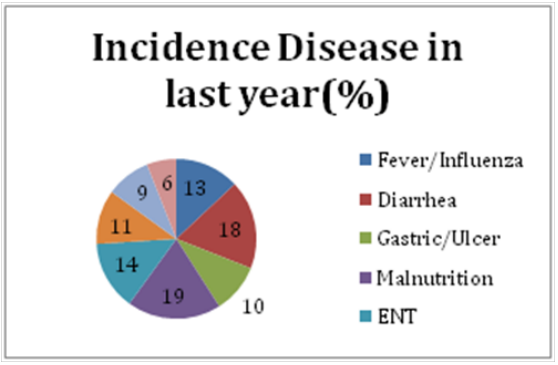

Figure 5 Distribution of Incidence of fever in last year.

Figure 6 show that rickshaw pullers are consuming Meat 12 rickshaw puller, Milk 5 rickshaw puller and no milk & meat 33 rickshaw pullers for last a month.

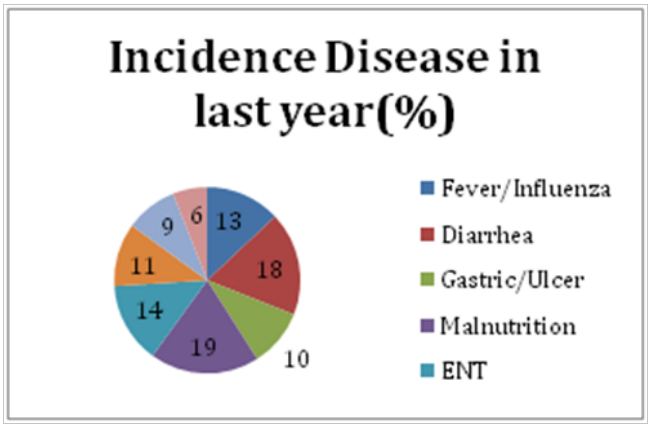

Figure 6 Distribution of Milk & Meat meal in last month.

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 owner of the rickshaw pullers or from the unauthorized lenders in high interest rate. A large number of them start life of rickshaw puller to repay their debt. The data analysis the 7% rickshaw pullers were teenager and the socio-economic causes 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. 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. On the other hand 12% rickshaw pullers earned BDT 200-300 per day, 72% gained between BDT 300-400 in a day, 10% get BDT 400-500 but only 6% get more than BDT 500 in a day. The marital status of rickshaw pullers was 94% married and 6% unmarried but no widowers. About 64% was access electricity of rickshaw pullers & 36% no access electricity. On the other hand about 82% wrist watches, 46% mobile, 68% television, 14% cycle, 20% radio were used. The distribution of receiving load from different NGOs for different purpose that 15% trade, 11% treatment, 13% marital purpose, land 3% purchase and others 8%. About 90% faced lack of rickshaw stands, 20% rickshaw pullers 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.

Height and weight are the most commonly used measures, not only because they are rapid and inexpensive to obtain, but also because they are easy to use. The anthropometric data (weight and height), in this study were 22% underweight, 72% normal range & 6% high risk of overweight but no obese persons. In the additional data analysis of 50 rickshaw pullers were 4% educated, 80% not educated & 16% self educated. On the other hand about 94% smokers, 20% drinkers, 22% gamblers and 4% no bad habits of rickshaw pullers. 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 heath

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worker, 28% purchase medicine without doctor's advice, 9% MBBS, 4% NGOs health center, 9% do not take treatment and 5% others. The 50 rickshaw pullers were using about 84% tube well, 12% piped water & 4% other. About 36% sanitary, 32% ring slab, 24% kacha and 8% others. The rickshaw pullers were suffered from different diseases where were 13% fever (influenza), 18% diarrhea, 10% gastric ulcer, 19% malnutrition, 14% ENT, 11% skin disease, 9% pneumonia & 6% others. For BMI for age (BAZ), the results from this survey. The difference results between these studies might be due to average expenditure for food, habit frequency, marital status, nutritional status, socio-economic status and geographical condition.[24–29]

Recommendation

The rickshaw pullers should be established in rural areas, in which the rickshaws are still the main mode of transportation, to sanction the loans on easy installments to the rickshaw pullers, so that, they can purchase their own rickshaws and also can get repaired them without being dependent on money lenders. The rickshaw pulling is an arduous job and cannot be continued for hours, so that being tired rickshaw pullers need rest, therefore, at least one rickshaw stand with basic facilities like, drinking water and lavatory has to be constructed near every main market. Moreover, there should be the provision of dispensary, medical insurance at cheap and easy premium and housing facilities for the families of rickshaw pullers, and special drives have to be taken to improve the literacy level, with special emphasis on vocational education for the children and other family members of the rickshaw pullers. However, efficient extension services have to be provided that the rickshaw pullers and other disadvantageous sections of the society may get benefited by the various governmental poverty alleviation programmes.

Conclusion

The overall analysis of the study reveals 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 is their working environment regulated nor their social security issues are addressed. In rickshaw-pulling neither there is need to invest money nor to have any special skill to drive it. Unemployment, low and uncertain income, debt, problem of housing, sanitation and health, lack of rickshaw stands, torture of police, poor condition of roads, corruption in the issuance of rickshaw's licenses, unsatisfactory fare etc. are their major problems. Because of their miseries they generally indulge themselves in bad habits like smoking, drinking, drug addiction, gambling etc. The major causes which compelled them to engage themselves in pulling rickshaws are poverty, unemployment, large family size, family disintegration, illiteracy, desire of work, debt, small size of land holdings etc. Majority of them suffer from cough and cold, joint, back and chest pains, asthma, gastroenteritis and tuberculosis which lead to their untimely deaths. They are also unaware about the governmental schemes launched for poverty alleviation. Out of 50 rickshaw pullers interviewed, only 16 percent were self educated. They earn very low income, their average daily income ranges from BDT 200 to 300 but only 6% rickshaw pullers income more than BDT 500. Their housing conditions are very poor and most of them live in house made up of mud or tin. They do not have potable drinking water and their accessibility in infrastructural facilities is also very poor. Planners and governing authorities should recognize that rickshaws are non-polluting, cheap and efficient mode of transportation which provides employment and self-sustenance for thousands of people at Hugra Union in Tangail District. To save many of them from a dark desolate future and to settle the tempestuous tides in their storm-wreaked lives, it is imperative to collaborate and mass-practice such solutions and find right combinations that take into account all situations.

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None.

Conflict of interest

The author declares no conflict of interest.

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