

## Effectiveness of Education on Health

### A Cross-Cultural Comparison between Muslim and Horizon Communities in Rajshahi Metropolitan City of Bangladesh

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#### Abstract

*Education and health are the two very important elements of human capital. Educational knowledge enhances human being to get proper healthcare facilities all over the world. In Bangladesh education and health are the two main fundamental rights of every citizen, which is ensured by the constitution. The present study, the author tried to find out effectiveness of education on health. The purpose of the study was to examine and compare how education influences on health outcome between Muslim and Horizon communities. In this study, total number of 275 (150 for Muslim and 125 for Horizon) respondents were interviewed by the author during April to July, 2012 in the Rajshahi Metropolitan City of Bangladesh. The simple random sampling technique was applied when sample size selected. Various statistical techniques were used during analyzed data, such as mean, median, standard deviation, variance and Pearson correlation with SPSS software in version 15. The present study showed that education was greatly influence over health outcomes. The author found that Muslim community dominated the minor community (Horizon) in the various sphere of life. Most of the respondents studied up to primary level which was 45.09%. 76.73% respondents seemed that proper educational knowledge positively enhanced to get healthy life style. 51.64% respondents seemed that communal destitution is existed to get educational attainment and take healthcare facilities. 68.73% respondents argued that they were concern about family planning methods. 66.18% respondents showed their opinion that educational knowledge made conscious about primary diseases, how and where to take diagnosis and treatment of their suffering diseases. 89.45% respondents expressed their fillings that educational knowledge enhances to get better healthcare facilities.*

**Keywords:** Education, Health, Cross-Cultural Comparison, Muslim, Horizon, Bangladesh.

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## Introduction

Education and Health status attainment around the world is the achievement aspect of human behavior across the social systems. An individual with his or her personal education and health status attainment not only occupies certain status in the family, group, community or wider society but also acquires certain prestige through which s/he meets his or her day-to-day human needs and solves personal physical, mental and social problems faced in a particular environment(Uddin:2009). In Bangladesh, according to constitution section-2, article-17, the government ensures free and compulsory education (Bangladesh constitution: 2011). Likewise education and health status attainment refers to the achievement of persons' relative position of education, occupation and income within that particular social system. This paper focuses on cross-cultural comparison of effectiveness of education on health status attainments and its interrelationships between Muslim and Horizon communities in Rajshahi metropolitan city of Bangladesh. In Rajshahi zila (district) the literacy rate is 53.0% and school attendance rate (5 to 24 years) is 58.9% (census report: 2011). Where the national literacy rate (7 years and above) is 51.8% and ethnic population is 1.10 %( census report: 2011).

The education and health status persons singly or collectively attain is socio-culturally constructed and modified in every society. Social scientists separately suggest three approaches to study education and health status attainment: Prestige approach by National Opinion Research Center, Functionalist approach by Duncan and others, and Class approach by Marx and Weber, including its categorical and numerical variables. These approaches generally assume that education and health status attainment may vary across the class, caste, sex, religion, race, region etc. due to inequality in property, power and opportunity distribution in the hierarchical social structure in every society. Based on the assumption relevant cross-cultural comparative studies conducted across the cultures reveal that education and health status attainment widely varies people in the dominant market economy compared to the non-dominant ones achieve high status. These studies argue that without high status achievement people in the highly modernized market economy cannot fulfill their human problems faced in that environment. Other comparative studies reveal that this education and health status achievement also varies among the different classes, castes, religions, races, regions within a given culture, because dominant class or cultural group always dominates, deprives and exploit non-dominant classes or cultural groups within a society. Regarding this several researches investigated in multicultural societies indicate that every parental education and health status attainment of the cultural groups is transformed into the next generation. As education and health status attainment of minority parents or non-dominant groups (Black, Hispanic, Asian and African born) compared to the majority or dominant ones (White) is low, so their children's education and health status attainment is also low. In addition, it is widely reported that males' education and health status attainment compared to the females within the family and other formal organizations also varies in different cultures. Education and health status attainment of males is higher than the females. These education and health status attainments education, occupation and income are cyclical process in which low educational attainment by someone influences his or her low prestige job involvement that in turn influences low income rate in the

particular social system in Bangladesh report that education and health status attainment of the dominant group (Muslim) is higher than the minority groups of Horizon in Bangladesh. The World Health Organization defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity"(WHO: 1948). In Bangladesh patient doctor ratio is 2773:1 and the available pure drinking water user 85% and the user of sanitary latrine is 87 % ( Bangladesh Economic Survey: 2012). Where pure drinking water user is 82.55% and the user of sanitary latrine is 77.45% in study area.

## **Background and Methodology**

### **Background**

Community is a group of people who not only share the same believe system but also acquire more or less the status in a particular environment. This community status may vary from other community. A community is a group or a collection of groups that inhabits a locality. The residential tie to an area is one attribute that distinguished a community from other groups. Another distinguished feature of a community is the total organization of social life in the area (Ogburn and Nimkoff: 1960). Bangladesh is an agrarian economic based rural country where various religious and ethnic communities, especially Muslim and Horizon, live in the same geographical location, and involve in the historical and social processes for livelihood (Uddin: 2009). The Muslim in this country is the dominant group, while the Horizon (Ancient believer) is non-dominant group. Religiously, the former believe in Monotheism, but the later believe in animism (Bongas). The former speak in Bengali language with the mixture of Arabic-Urdu preference. On the other hand the later speak in Austric-Munday, and sometimes speak in Bengali version with the other Bengali-speaking people. Based on their respective fundamental believe system both the communities interact with agriculture economy for their livelihood. Although about 75% of the rural people live in subsistent economy in which most of them are poor, minority groups such as the Horizon are the poorest of the poor. One report indicates that 53% of the rural peoples are poor and there are 55 million food insecure households and 62% adults are illiterate. It is more interesting that although main occupation of the rural villagers is agriculture, man-land ratio is very low and many of them are landless or near the landless due to law of inheritance, land fragmentation and over-population. Some reports indicate that about 62% of the rural households are functionally landless. In the education and health status attained by the Muslim, Horizon is embedded in Rajshahi city of Bangladesh.

### **Objectives of the Study**

The study is based on the effectiveness of education on health of Muslim and Horizon Communities in Rajshahi metropolitan city of Bangladesh. The main objectives of the study are as follows:

1. To closely know the effectiveness of education on health between Muslim and Horizon communities.

2. To find out and compare the situation of the educational and healthcare facilities attainments between Muslim and Horizon Communities in Rajshahi metropolitan city of Bangladesh.
3. To know what types of diseases and health hazards faces by the respective community people.

### **Hypothesis of the study**

Hypothesis 1: Educational attainment of the Muslim community is higher than Horizon community in the Rajshahi metropolitan city of Bangladesh.

Hypothesis 2: There are positive significant relationships between effectiveness of education on healthcare attainment of the Muslim and Horizon communities in the study area.

Hypothesis 3: Better quality of education enhances the better quality of healthcare outcomes.

Hypothesis 4: Educated people are very much conscious about various diseases cured system and prevention than illiterate people of the study area.

### **Methodology**

This study was conducted during April to July, 2012 in the Rajshahi Metropolitan City of Bangladesh where Muslim and Horizon community people live side by side. Three villages like Hetem Khan Pan Bahar, Methor Para and Karigar Para, ward no. 11 under the Rajshahi City Corporation in Boalia Thana (Police Station), were purposefully selected for this study. Muslim community people live in Hetem Khan Pan Bahar, and Karigar Para village and Horizon community people live in Methor Para village.

### **Features of Sample**

There were total numbers of respondents 275 (Muslim no.150 and Horizon no.125) who were enlisted in this study. 275 respondents were selected by using simple random sampling procedure whose age ranged 10 to 45 years and Male (200) and Female (75). Most of them were day laborers (33.09%) and rests of them were Sweeper (22%), Rickshaw puller (20%) and small Shopkeeper (8.73%). Most of the respondent's monthly income was Tk.5000 to 7500 (1 U.S Dollar = 82 Taka in Bangladeshi currency).

### **Variable and Measure**

Community was nominally measured and coded as 1= Muslim, 2= Horizon. Sex was nominally measured and coded as 1= Male, 2= Female. Age was numerically measured in years. Family structure was nominally measured and coded as 1= Nuclear, 2= Joint. Family authority was nominally measured and coded as 1= Parental, 2= Maternal. Occupation was nominally measured and coded as 1= Job holder, 2= Sweeper, 3= Rickshaw puller, 4= Small shopkeeper, 5= Day laborers. Education was nominally measured and coded as 1= Primary level, 2= Secondary level, 3= Tertiary level. Knowledge of health care facilities were nominally measured and coded as 1=

Yes, 2= No.

Relationship of effectiveness of education on health, here effectiveness of education was independent variable and health was dependent variable.

### **Instrument and Procedure**

The data of this study were quantitative in nature of effectiveness of education on health between Muslim and Horizon communities. In order to collect data semi-structured questionnaire with close and open ended questions was made in Bengali language version, because of these communities respondents did not understand English. After collecting necessary data, it was converted into English version. In order to ensure reliability and validity of the data rapport was build up and followed with the respondents from initial stage to last stage.

### **Data Analysis**

Based on author's objective, the collected data were analyzed by descriptive statistics, presenting frequency distribution; mean, median, standard deviation, variance and Pearson's correlation was applied to measure the relationship between education and health. The author used the SPSS software version 15 to analyze the necessary data. Especially Pearson's correlation test technique were applied to find out similarities or differences and associations in the effectiveness of educational attainment on healthcare outcome between Muslim and Horizon communities in the three villages like Hetem Khan Pan Bahar, Methor Para and Karigar Para, ward no. 11 under the Rajshahi City Corporation in Boalia Thana(Police Station). These statistical techniques to find out cross-cultural differences and interrelationships for the educational status attainment variables included were more relevant, because most of the variables used were numerical (quantitative) in nature ( Uddin : 2009).

### **Results**

In order to find out and compare effectiveness of education on health by Muslim and Horizon communities people in Rajshahi metropolitan city of Bangladesh, education, healthcare awareness, occupation and the income in the study area were measured and compared. In addition, this study also analyzed and compared how education and health influence each other between the Muslim and Horizon communities. The findings of the comparative analysis are given the tables, 1-2.

### **Educational Status Attainment**

Table 1 and 2 presents the data on educational status attainment by the Muslim and Horizon community's studies. The overall data clearly show that educational status attainment of Muslim community was higher than the Horizon community. Educational attainments of Muslim and Horizon communities were respectively Primary level 45.09%, Secondary level 32.73% and tertiary level 22.18% (See table 1). The findings presented in the table suggest that the people in both the communities across the educational attainments compared the

Muslim was higher than Horizon community. However, based on Pearson's Correlation test these frequency distribution for both communities educational attainment were significantly different between the communities at  $p < 0.01$  level.

### Healthcare Status Attainment

Table 1 and 2 presents data healthcare status attainment by the Muslim and Horizon community were different in nature. In some cases Muslim community got preference in admission of hospital and other kind of treatment than Horizon community in the study area. However, based on Pearson's Correlation test these frequency distribution for both communities healthcare status attainment were significantly different between the communities at  $p < 0.01$  level. In the study area Horizon community was the under privileged than that of dominant Muslim community in taking various healthcare facilities. So, we observed Muslim community was privileged in different available healthcare opportunities than that of Horizon community in the study area.

*Table 1: Various socio-economic variables between Muslim and Horizon communities in Rajshahi Metropolitan City of Bangladesh*

Variables	Frequency N= 275	Percentage (100)
<b>Community of the respondents</b>		
Muslim	150	54.55
Horizon	125	45.45
<b>Sex of the respondents</b>		
Male	200	72.73
Female	75	27.27
<b>Age of the respondents</b>		
10-20 Years	20	10.18
20-30 Years	130	47.27
30-40 Years	78	28.36
40-Above Years	39	14.19
<b>Educational status of the respondents</b>		
Primary Level (i-v)	124	45.09
Secondary Level (vi-xii)	90	32.73
Tertiary Level (xiii-xvi)	61	22.18
<b>Health status attainment of the respondents</b>		
Primary status	210	76.36
Universal status	65	23.64
<b>Occupational attainment of the respondents</b>		
Job Holder	42	15.27
Sweeper	63	22.91
Rickshaw puller	55	20.00
Small Shopkeeper	24	8.73
Day Laborers	91	33.09

Variables	Frequency N= 275	Percentage (100)
<b>Monthly income of the respondents</b>		
2500-5000 (in Tk.)	61	22.18
5000-7500 (in Tk.)	95	34.55
7500-10000 (in Tk.)	74	26.91
10000- Above (in Tk.)	45	16.36
<b>Knowledge of healthcare facilities of the respondents</b>		
Yes	197	71.64
No	78	28.36
<b>Knowledge about safe drinking water of the respondents</b>		
Yes	227	82.55
No	48	17.4
<b>Knowledge about hygiene of the respondents</b>		
Yes	158	57.45
No	117	42.55
<b>Types of latrine by use of the respondents</b>		
Sanitary	213	77.45
Unsanitary	62	22.55
<b>Educational knowledge enhances to get better health facilities of the respondents</b>		
Yes	246	89.45
No	29	10.55
<b>Any hazardous situation to admit school by the major community (Muslim) of the respondents</b>		
Yes	27	9.82
No	248	90.18
<b>Educational knowledge prevents primary diseases on health hazards of the respondents</b>		
Yes	199	72.36
No	76	27.64
<b>Educational knowledge enhances to get healthy life of the respondents</b>		
Yes	211	76.73
No	64	23.27
<b>Educational attainments conscious about primary diseases of the respondents</b>		
Yes	182	66.18
No	93	33.82
<b>Have any knowledge to get proper diagnosis or treatment of the respondents</b>		
Yes	135	49.09
No	140	50.91
<b>Have any communal destitution to get healthcare facilities of the respondents</b>		
Yes	135	49.09
No	140	50.91
<b>Have any communal destitution to get educational attainment of the respondents</b>		
Yes	142	51.64
No	133	48.36
<b>Have any knowledge to get proper treatment of suffering diseases of the respondents</b>		
Yes	189	68.73
No	86	31.2
<b>Have any knowledge about family planning methods of the respondents</b>		
Yes	130	47.27
No	145	52.73
<b>Knowledge about safe delivery and maternity of the respondents</b>		
Yes	122	44.36
No	153	55.64

Table 2: Effectiveness of Education on Health results in statistical analysis of socio-economic variables between Muslim and Horizon communities in Rajshahi Metropolitan City of Bangladesh.

Variables	Mean	Median	Std. Deviation	Variance	Correlation
Health status attainments of the respondents	1.23	1.00	.42	.18	1
Educational status of the respondents	1.77	2.00	.78	.62	.825**
Community of the respondents	1.45	1.00	.49	.24	.609**
Sex of the respondents	1.27	1.00	.44	.19	.140*
Age of the respondents	2.46	2.00	.85	.73	.736**
Occupational attainment of the respondents	3.21	3.00	1.48	2.21	.669**
Monthly income of the respondents	2.37	2.00	1.00	1.00	.731**
Family structure of the respondents	1.30	1.00	.45	.21	.846**
Family authority pattern of the respondents	1.14	1.00	.35	.12	.752**
Knowledge of healthcare facilities of the respondents	1.28	1.00	.45	.20	.884**
Knowledge about safe drinking water of the respondents	1.17	1.00	.38	.14	.827**
Knowledge about hygiene of the respondents	1.42	1.00	.49	.24	.647**
Types of latrine by the use of the respondents	1.22	1.00	.41	.17	.970**
Educational knowledge enhances to get better health facilities of the respondents	1.10	1.00	.30	.09	.617**
Any hazardous situation to admit school by major community( Muslim) of the respondents	1.90	2.00	.29	.08	.184**
Have any knowledge about unhygienic latrine of the respondents	1.33	1.00	.47	.22	.785**
Educational knowledge prevents primary diseases or health hazards of the respondents	1.27	1.00	.44	.20	.900**
Educational knowledge enhances to get healthy life of the respondents	1.23	1.00	.42	.17	.990**
Educational attainments conscious about primary diseases of the respondents	1.33	1.00	.47	.22	.778**
Have any knowledge to get proper diagnosis or treatment of the respondents	1.50	2.00	.50	.25	.546**
Place of treatment of the respondents	1.50	1.00	.68	.46	.766**
Have any communal destitution to get healthcare facilities of the respondents	1.50	2.00	.50	.25	.546**
Have any communal destitution to get educational attainment of the respondents	1.48	1.00	.50	.25	.575**
Have any knowledge to get proper treatment of suffering diseases of the respondents	1.31	1.00	.46	.21	.825**
Have any knowledge about family planning methods of the respondents	1.52	2.00	.50	.25	.527**
Knowledge about safe delivery and maternity of the respondents	1.55	2.00	.49	.24	.497**

\*\* Correlation is significant at the 0.01 level

\* Correlation is significant at the 0.05 level

## Discussion

Purpose of the study was to explore and compare effectiveness of Education on Health status attainment between Muslim and Horizon communities in the Rajshahi metropolitan city of Bangladesh. Educational status attainment of Muslim community people was higher than the Horizon community people. Occupational status attainment of the Muslim is better than Horizon community. The findings of Pearson's Correlation Test suggest that there were significant differences in Education and Health status attainment, occupation and income between the Muslim and Horizon community in the study area. In addition, these variables of Education and Health attainment were significantly related to each other. Previously the author formulated four hypotheses: (1) Educational attainment of the Muslim community is higher than Horizon community in the Rajshahi metropolitan city of Bangladesh, (2) There are positive significant relationships between effectiveness of education on healthcare attainment of the Muslim and Horizon communities in the study area, (3) Better quality of education enhances the better quality of healthcare outcomes and (4) Educated people are very much conscious about various diseases cured system and prevention than illiterate people of the study area. However, the findings of the study confirm the hypotheses previously determined in the study area.

In order to examine and compare the hypotheses 275 respondents ( Muslim =150 and Horizon =125 respondents) from the three villages, Hetem Khan Pan Bahar, Methor Para and Karigar Para, ward no. 11 under the Rajshahi City Corporation in Boalia Thana(Police Station), Bangladesh, were randomly selected by cluster sampling . The selected respondents were singly interviewed with semi-structural questionnaire method. The finding of Pearson's correlation test suggest that there were significant differences in effectiveness of education on healthcare outcomes ( $p < 0.01$  level) and also variables socio-economic attainment were significantly related to each communities people. However, the findings of the study confirm the hypotheses previously settings in the study area. Educational attainment of Muslim community was higher than that of Horizon community that was 45.09% and 32.73% respectively. There were 89.45% Muslim and 75.62% Horizon community were argued positive significant relationships between effectiveness of education on healthcare attainment in the study area. There were 76.73% Muslim and 65.43% Horizon community people expressed their opinion that better quality of education enhances the better quality of healthcare outcomes. There were 72.73% Muslim and 63.89% Horizon community people deeply believed that educated people are very much conscious about various diseases cured system and prevention than illiterate people of the study area.

## Conclusion and Recommendations

Effectiveness of Education on Health status attainment of Muslim and Horizon communities are the significantly correlated. People of the two communities were said that the knowledge of education positively

influences over healthcare facilities and attainment not only occupy certain statuses and prestige in the family and the community but also meet human needs and solve familial problems faced in a particular socio-cultural environment. In order to compare education and health status attainment, including education, occupation and income in this study Muslim and Horizon communities were considered. The results of the study are supported by several studies conducted in abroad and Bangladesh. Based on these studies' findings the present study argues that inequality, deprivation and dominance in rural power structure between the two communities influence variations among the status attainment in the study area. Further cross-cultural study should conduct on how inter-community relations in hierarchical social structure of Bangladesh influence their education and health status attainment.

1. Government should ensure equality in getting educational and healthcare attainment of the given communities.
2. Government should be given extra priority towards Horizon community on educational and health related activities attainments.
3. Non-Government organization should be conscious as minor Horizon community primary diseases of the study area.
4. Local and national leaders should be taken necessary steps to change their fait and luck through given proper educational and health related scheme of Muslim and Horizon community.
5. Various workshop and training program should be arranged to make them conscious and enable to prevent their primary and daily diseases through proper and working education.
6. Ensure the proper school and healthcare attainment between the Muslim and Horizon communities.
7. Improve and provides the community healthcare facilities by the Bangladesh Government and
8. Finally community people should awareness about basic and universal education and healthcare knowledge.

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