

## 論 説

## Human Capital in Bangladesh

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## Abstract

Two of the most important Sustainable Development Goals (SDGs) to be achieved by 2030 are good health and well-being and quality education. Many previous studies have found that education, good health, well-being and healthier practices among the people result in economic growth and development. With the data from Household Income and Expenditure survey, this study inquires whether there is improvement in education, health and well-being among the respondents and a change in household expenditure made on health education. Bangladesh has achieved the Millennium Development Goals (MDGs) of universal primary education with about 98% net primary enrollment and gender parity in primary and secondary education. Despite the reduction of under-five mortality, infant mortality, maternal mortality, as well as increased numbers of skilled personnel attending births, Bangladesh has still to go a long way to go to achieve the targets child mortality, infant and maternal mortality set by sustainable development goals. The study uses the Household Income and Expenditure Survey (HIES) for 2000, 2005 and 2010 and found increasing average year of schooling, decreasing gender disparity in educational attainment beyond primary education among people aged 10-30, and the incidence of suffering illness among working age population decreasing with a rising trend in household spending on health and education.

**Keywords:** Health, Education, Human capital, Multidimensional poverty.

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## 1. Introduction:

Human capital includes education, training, medical care and other additions to knowledge and health (Gary Becker, Nobel Prize Lecture). It includes not only education and training but many other aspects of early childhood interventions and intergenerational mobility (Gatti, 2018). Human capital is a form of investment analogous to investment in physical capital and this investment is expenditure made on social services, health and education (Bowman, M.J.). The purpose of this study is to examine how human capital has evolved, improved and been reflected in the Bangladesh Household Income and expenditure survey of 2000, 2005 and 2010. This study treats human capital as education in terms of years and level of educational attainment, and well-being is captured by the prevalence of incidence of illness, and household expenditure made in health and education. Human capital development is well accepted as a crucial factor for industrialization and modernization in many countries. Human capital attained through education and skills have significant importance for sustained long term growth (Mankiw, Romer, and Weil, 1992). A high level of productivity is fueled by an abundance of well-educated quality laborers. Productivity particularly in industry and the service sector, contributes to economic growth (Bank, 2017). The growth experienced by China is often explained by technological progress led by physical and human capital formation (Ding & Knight, 2011). Average years of schooling for the working age population in Bangladesh is just above 6 years. Though primary education is emphasized in developing countries, according to Ding and Knight, primary school enrolment has no effect and secondary and higher education enrolment has a positive effect on growth.

Investment in human capital development contributes to growth as it is evident from the growth of China, Korea and other East Asian countries (Tilak, 2002). China experienced an 8.6 percent average rate of growth during 1978–2007. Despite its growth accelerating effects, Bangladesh is not making the required level of investment in human capital. Bangladesh is a lower middle-income country and one of the countries that made the lowest investment on health and education. Education and skills remain the third binding constraint to growth and development after transport and energy in South Asia. Per capita GDP is increasing in Bangladesh but its investment in health and education is sticking around 2 percent of GDP for both health and education (Table: 1), and only 14.35 percent of the population aged 25 years and above has upper secondary education. Taiwan invests more than 6 percent; Korea invests about 4 percent of gross national product (GNP) on education. Countries with higher gross national income and per capita GDP have higher average human capital scores.

Table 1:

Variables	2000	2005	2010	2016
GDP per capita, PPP (constant 2011 international \$)	1692.42	1990.95	2518.43	3424.01
Educational attainment, at least lower secondary, population 25+, total (%) (cumulative)	-	-	-	41.50
Educational attainment, at least post-secondary, population 25+, total (%) (cumulative)	-	-	-	14.35
Expenditure on Health (% of GDP)	2.00	2.28	2.50	2.37
Expenditure on education, (% of GDP)	2.13	-	-	1.54
Health expenditure per capita, PPP (current international \$)	27.62	41.77	64.17	90.60

Data: World Development Indicators

To catch up with the level of economic and human development of the People's Republic of China, the Republic of Korea and other successful Southeast Asian economies, Bangladesh needs to raise the quality of education and skill of its workforce (Bank, Asian Development 2017). South Asian countries have made strong educational progress regarding enrollment in primary and secondary levels, but disparities remain in access, participation, and completion rates across gender, income, and social groups. Low quality and high disparity in learning outcomes are major challenges in South Asia. Higher public and private investments in education are necessary to upgrade and reduce disparities in learning outcomes and Bangladesh's current human capital index rank reflect that the severe challenges and steep requirements are steeper of the country.

This study aims to contribute to the existing literature on Bangladesh using three periods of Household Income and Expenditure data about a prospective human capital development path, especially the improvement in average education of the people aged 10 and above and changes in the fraction of people with different education level. It also intends to show changes in the fraction of people suffering diseases, duration of suffering, length of travel and wait time for the medical service and changes in household expenditure on health and education.

The rest of the paper is organized as follows. Section 2 summarizes the previous studies on human capital formation, investment and its effect. Section 3 then discusses the data and methodology while section 4 discusses the findings. Section 5 concludes the paper.

## 2. Literature Review:

According to a report from the Asian Development Bank published in 2017, the average years of schooling among the population aged between 15 to 64 years was only over 6

years in Bangladesh and India, while in Sri Lanka it was over 10 years in 2010. It is reported by Barro and Lee (2013) that in Bangladesh, 30–50 percent of the population aged 15–64 had some secondary education or higher and one third remains uneducated.

The relationship between human capital and economic growth is controversial in respect of channels through which human capital influences economic growth. The “Nelson-Phelps approach” and the “Lucas approach” derived from endogenous growth theory looked into this relationship through different frameworks (Grossman, 2010). The Nelson-Phelps approach associate growths to the stock of human capital through its ability to innovate and the ability to facilitate technological adaption. The Lucas approach, conversely, is consistent with the Mincerian earning function which assumes that growth is driven by the accumulation of human capital and treats human capital as a direct input in the production function. The existence of evidence for human capital influencing growth is evident from the literature. In OECD countries, human capital is found to have significant positive effects on growth and human capital in relation to the diffusion of technology most important for growth (Engelbrecht, 2003).

Household expenditure on health and education is an important household decision constrained by other investment decisions and consumption tradeoffs. It is important for the future employability and income of the children, and eventually, for the growth and development of the country. Generally, higher income families spent a larger share of income on education and childcare before children reach 18 years (Mauldin, n.d. et.al, 2001). Household education expenditure made on children at primary level improves the achievement of students at the bottom and a 1000 yuan increase in private tuition increases the math score of a primary student by 54% of a standard deviation (Zhao, 2015). Provo (2000) measured human capital formation and emerging gap in schooling and learning in 164 countries with data covering 98 percent of world population from 2000 to 2017 and found that although enrollment increased, learning has stagnated, and girls outperform boys on learning. According to him, though human capital is proxied by the years of schooling, it is not years of schooling, but learning that is associated to growth and human capital accounts for a third of cross-country income differences.

On measures of learning, Bangladesh and India perform as per with many Sub Saharan countries (Provo, 2000). Malaysia and Thailand have successfully expanded access to school, but to lift them out of middle-income status, an education system with marketable skills is indispensable (Jimenez, Nguyen, & Patrinos, 2012). According to Kambhampati (2008), the prospect of a higher rate of return plays an important role, especially in secondary school and for girls to make household education expenditure in India. For a poor country like Bangladesh where public spending on health care is just above 2 percent of GDP, it is heavily dependent on household spending for financing. In Nepal, household expenditure on health increases with the level of household income, and the poorest quartile

spend 3.2 percent of income on health, while the second quartile spent 4.6 percent (Hotchkiss & Gordillo, 1999). Low-and middle-income countries in the 1980s have promoted user fees for public sector health services but out of pocket payments impoverish households and this deepens when income loss due to illness is counted (McIntyre, Thiede, Dahlgren, & Whitehead, 2006). World health survey supports that with the comparison to other types of survey, the out of pocket expenditure on health is increasing (Xu, Ravndal, Evans, & Carrin, 2009). In Vietnam after introduction of a privatized user fee sponsored health care system, a survey in 2008 found that the poor and near poor financed health care more heavily with loans that has a detrimental food reduction effect (Nguyen et al., 2012).

### 3. Data and Methodology:

National Institute of Population Research and Training (NIPORT) conduct demographic, health and health related surveys whereas the Bangladesh Bureau of Educational Information and Statistics (BANBEIS) collects educational statistics and information for all educational levels in Bangladesh. So, it is reasonable to consult and examine the human capital situation from data collected by NIPORT and BANBEIS. The problem is, though demographic, and while Health Survey collected information on health as well as education, it does not collect respondent's information on educational institution, kinds of educational institution respondent attended, and expenditure made on education. On the other hand, educational information collected by BANBEIS has all kinds of information on education, but it does not have information on household characteristics and household members. So, comparing the human capital situation in relation to household characteristics and characteristics of its members is not possible. Bangladesh Household Income and Expenditure (HIES) survey conducted by Bangladesh Bureau of Statistics collects information on household characteristics and characteristics of its members in respect of health, education, income, profession and consumption. Therefore, it is convenient to examine the human capital situation from Household Income and Expenditure data, as it reflects the human capital situation as well as its effect on variable related to poverty.

Bangladesh Bureau of Statistics collects household income and expenditure data in five years intervals. In this study, HIES data for the year 2000, 2005 and 2010 is used. The educational information collected in HIES includes whether an individual can read, write, education level attending if still studying, institution and type of institutions. This education information has been shown across different age groups for different round of HIES data. The respondents of each round of data have been grouped as respondents aged between 10-19, 20-29, 30-39, 40-49 and respondents aged 50 years and above to catch education and health profile. Respondents' education has been labeled as illiterate, literate or prepri-

mary, primary and some high school education, secondary and higher secondary education, tertiary education. For physical well-being and healthy practices, the respondents have provided information whether they have suffered any illness or symptoms over a period of 12 months preceding to the survey. Time spent to avail treatment and cost of treatment are the most important indices that show how costly is the access to health care. The cost of health care and education expenditure is calculated per household by adding the cost incurred by the members of the household, but the time is not aggregated to within household for treatment. A household is deemed health-deprived if any child has died in the family. HIES data does not include this information and so, for this paper we have considered a household health-deprived if any member in the household is suffering for more than a year. Though the death of a child is a matter of permanent agony, a suffering member is also constant source of pain and causes drainage of time, money and peace in the household. Health-deprived households are graphed over the age groups over different periods of data and it is shown how the household is faring in respect of health in Household income and expenditure data.

#### 4. Human capital situation in HIES data:

##### 4.1 Educational Attainment

To develop and catch up with countries like the People's Republic of China, the Republic of Korea, and other Southeast Asian countries who once were at the similar stage of economic development as Bangladesh, faster rate of economic growth is required. Though in recent years Bangladesh has experienced growth at a rate of more than 7 percent, it is very important for Bangladesh to understand the role of and build up human capital to maintain sustained economic growth (Bank, Asian Development 2017). Among other things, health and primary education are the basic requirements for development and competitiveness (Schwab and Sala-i-Martin, 2014). An abundant and well-educated labor force and labor-intensive manufacturing industry in 1960s and 70s propelled the Republic of Korea to rapid economic growth. Its quality labor force subsequently helped to adapt advanced technology and to maintain sustainable growth. In comparison to East Asian countries such as China and Malaysia, the human capital stock in Bangladesh in 2000 is even below the level of China in the 1970s (Ribound, Savchenko, & Tan, 2007).

According to them, 50 percent of the population was illiterate in 2000 in Bangladesh. We also have the similar finding (Table 2). Asian Development Bank reported from Barro and Lee (2013) in Human Capital Development in South Asia that 43.2 and 31.9 percent of the population in Bangladesh aged 15-64 had no schooling in 2000 and 2010 respectively. According to the report, 21.4 percent of the population completed primary, 25.2 percent

Table 2: Education Level of Population aged 10 and above

Year	Illiterate	Literate	Less than Secondary	Secondary and Higher secondary	Tertiary
2000	50%	7.4%	29.9%	9.7%	3.1%
2005	43.1%	8%	34.5%	10.7%	3.7%
2010	39.5%	9.8%	35.6%	11.7%	3.5%

completed secondary and 2.5 percent completed tertiary education in 2010 in Bangladesh. Ribound, Savchenko, & Tan (2007) found in 2000 only 3 percent of the population had education beyond secondary level. In Bangladesh, only 54% of the students enrolled in primary come to secondary education. The transition in Bangladesh from primary to secondary education is obstructed by cost and being a girl and girls in poor rural and urban slum households failed to complete the secondary education because of child marriage. The Global Human Capital report in 2017 ranked 130 countries regarding how well they are developing their human capital, and ranked Bangladesh 111. The report has assessed human capital situation over five distinct age groups 0-14 years, 15-24 years, 25-54 years and 55-64 years and 65 years and over with an aim to capture the full human capital potential profile of a country. On assessment Bangladesh has failed to reach the 60% threshold with regard to developing human capital. Countries with high talent capacity and development have high potential to accelerate human capital performance (Forum, 2017). According to the report published by World Economic Forum, human capital potential of Bangladesh, like Pakistan, two of the most populous countries of the South Asia, is held back by insufficient educational enrollment rates and poor-quality primary schools and both countries performs better at the tertiary level, though the graduates lacks skills diversity in the universities. Global Human Capital Index finds a clear correlation between an economy's income level and its human capital development

We found in Household Income and Expenditure data that in 2000, 2005 and 2010, the fraction of population illiterate aged 10 and above was 50, 43.1 and 39.5 percent respectively and the percentage of literate people who have not completed primary education were around 10 percent in 2010 (Table 2) and compared to the Asian Development Bank Report (2017), the primary and tertiary education situation in Bangladesh has improved. In 2010, about 35.6 percent people have at least primary but have not completed secondary education and 3.5 percent had tertiary education and over the period of 2000-2010, the percentage of population with primary education has increased steadily. Bangladesh is being praised for its achievement for enrollment in primary education, advancement of girls in primary and secondary education, but from HIES data for 2000, 2005 and 2010 shows that the gender gap still persists in secondary, higher secondary and tertiary education (Table 3). From Table 3, it appears that more womens are illiterate in Bangladesh, and

Table 3: Gender Gap in Education

Education Level	2000			2005			2010		
	Female	Male	Gender gap	Female	Male	Gender gap	Female	Male	Gender gap
Illiterate	55.2%	44.9%	1.2	47.6%	38.7%	1.2	43.1%	35.8%	1.2
Literate	7.2%	7.5%	1.0	7.3%	8.7%	0.8	9%	10.6%	0.8
Primary	29.3%	30.4%	1.0	34.8%	34.3%	1.0	35.9%	35.3%	1.0
Secondary and Higher Sec	6.9%	12.4%	0.6	8.6%	12.9%	0.7	10.1%	13.3%	0.8
Tertiary	1.4%	4.8%	0.3	1.8%	5.5%	0.3	1.9%	5.1%	0.4

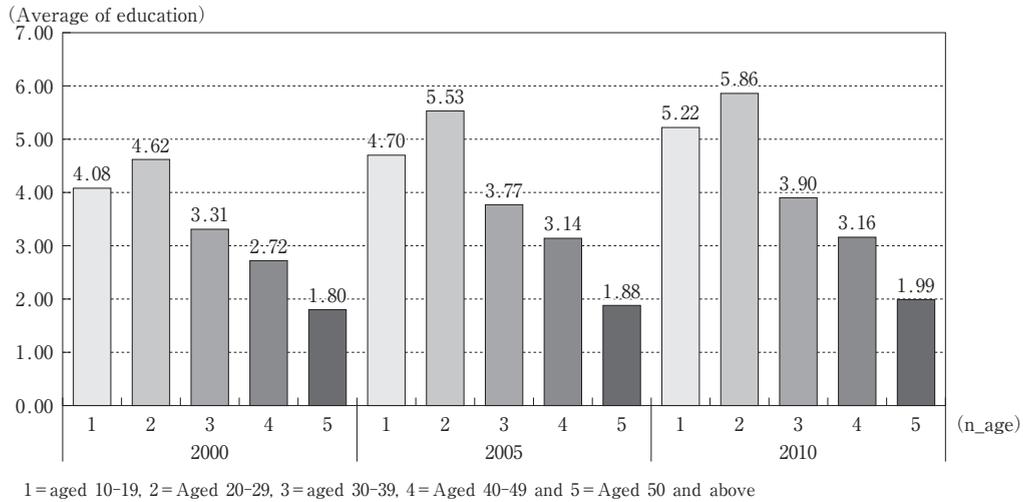
only in primary education there is gender equity.

Though gender inequality in secondary and higher secondary education is narrowing, it is still severe in tertiary education.

The mean years of schooling over the period of 2000–2010 has not changed significantly. The average years of education of the people aged 10 and above was 3.54 years in 2000 and it was 4.37 and 4.30 years in 2005 and 2010 respectively. However, if we look at the pattern of changes in average years of schooling over different age groups, it is evident that the changes of average school years are more pronounced in the group of people aged between 20–29 years (Figure 1), and average years of schooling of the people aged 10 to 29 years is experiencing an increasing trend, which captures the policy initiative taken by the government of Bangladesh. To achieve the education for all and 100 percent enrollment rate in primary education set by the Millennium Development Goals (MDGs), Bangladesh started the Primary Education Stipend Program (PESP) in 2001. The objectives were to increase enrollment, attendance, persistence and performance of the children from poor families in rural and urban areas. The PESP program provides Tk.100 per child per month to mothers in need of financial support on condition of regular school attendance. Nearly 10 million mothers receive stipends under this program through mobile banking accounts (Gelb, Mukherjee, Navis, Akter, & Naima, 2019). Similar to the PESP, to continue the progress achieved in primary education, Bangladesh since 2008 has been implementing Secondary Education Quality and Access

Enhancement Project (SEQAEP). SEQAEP aims to increase the quality of secondary education and increase the equity and access of the boys and girls living in remote poor households. The SEQAEP is being implemented in 125 upzilas and students eligible for the stipend receive from USD 15 to 40 a year. According to the World Bank, 2.3 million students have benefited from this program and 54 percent of them are girls. Besides this, under the Secondary Education Sector Investment Program (SESIP), Bangladesh aims to achieve quality, efficiency and equity and relevant secondary education. The outcomes intended to achieve under SESIP are an improved and relevant curriculum, enhanced capaci-

Figure 1: Average year of education by age group



ty of the teacher and usage of Information Communication and Technology (ICT) in the classroom (Directorate of Secondary and Higher Secondary Education, Bangladesh). These programs successfully help Bangladesh achieve MDGs relating to primary education and gender parity in primary and secondary education.

#### 4.2 Health and Well-Being

Health is an important aspect of human capital. Good health is directly correlated with the productivity and growth of a country. Bangladesh experiences a shortage of physicians, and maldistribution of the physicians it has. According to the Ministry of Health and Family Welfare, Bangladesh (MoHFW HRD, 2014), there are only 3.6 physicians and 2.2 nurses and midwives for 10,000 people, while the Republic of Korea has 27.6 physicians and 40.7 nurses. In South Asia, the Maldives has 4 times the physicians and more than 20 times of the nurses Bangladesh has. Because of this, people all over the country often have to travel far to cities and has to wait to receive consultation and health care. In 2000, children aged less than 10 years of age on average suffered less compared to the next two rounds of data and people aged between 10 to 40 years suffered less in 2005 and average years of suffering of the people in this age (figure 2) group decreased compared to the year 2000. Table 4 shows the distribution of people aged 10 and above over different age groups who are suffering from chronic illness. Illness affect people's productivity and accumulation of skills and human capital. It is a good sign that the fraction of children suffering from diseases has declined from 6.42 percent in 2000 to 3.22 percent in 2010. Diseases affects children's school attendance and accumulation of education and thus affects their employability and the growth of the country on aggregate level. Another important thing is that the fraction of people aged from 20 to 40 suffering from diseases is also experiencing a declin-

Figure 2: AVERAGE YEARS SUFFERD BY AGE GROUP

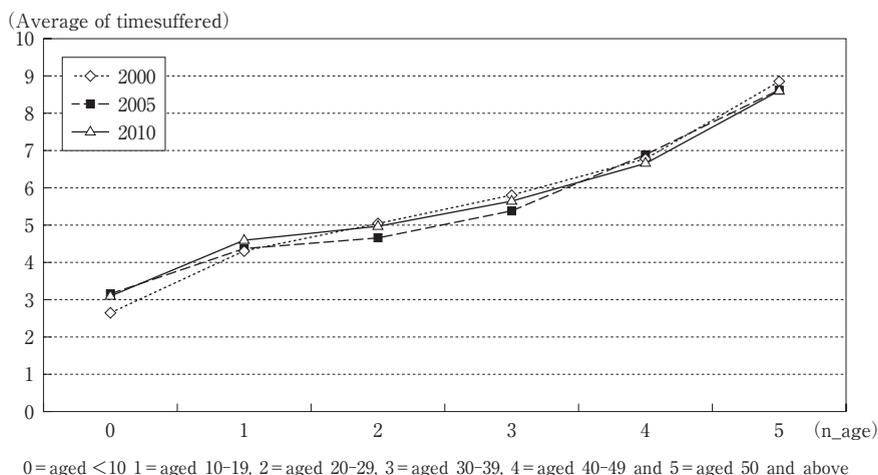
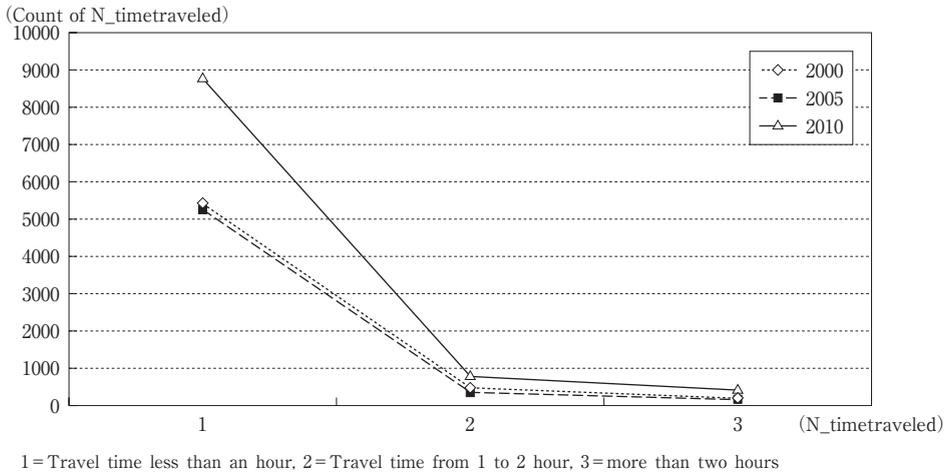
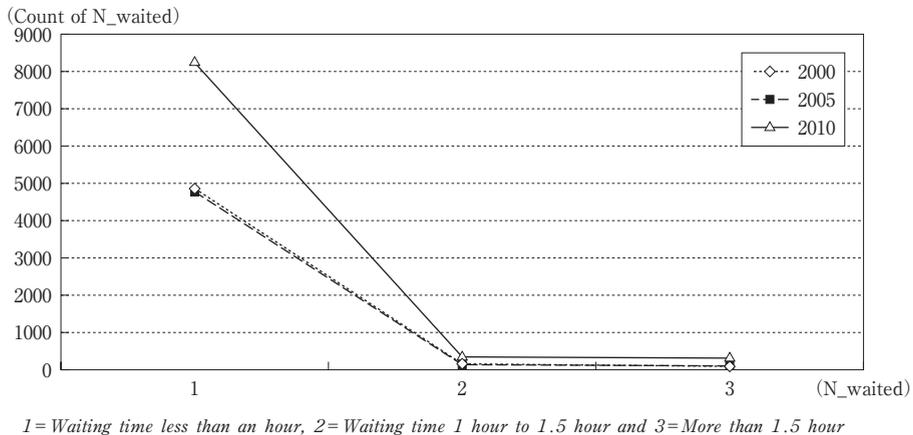


Table 4: People suffered from chronic illness

People Aged	2000		2005		2010	
	Number of suffered	% of suffered	Number of suffered	% of suffered	Number of suffered	% of suffered
0-9	387	6.4%	326	5.2%	263	3.2%
10-19	503	8.4%	502	8%	443	5.4%
20-29	748	12.4%	660	10.5%	844	10.4%
30-39	1182	19.6%	1194	19%	1434	17.6%
40-49	1175	19.5%	1298	20.6%	1807	22.2%
50-	2029	33.7%	2332	37%	3366	41.3%

ing trend, but the fraction of people suffering diseases over 40 years is increasing. So, in Bangladesh, the fraction of working age people suffering from diseases has declined since 2000. Travel and waiting times for elective treatment is an important indication of the quality and efficiency of the health care system. Length of travel and waiting time reflects the distribution of health care centers and physicians. Patients living further away from the health care center they intended to attend have more negative health outcome related to survival rates, length of stay in the care center and follow ups (Kelly, Hulme, Farragher, & Clarke, 2016). A two hour threshold for access to emergency obstetric and surgical facilities is approved by WHO and the Lancet Commission for Global Surgery. It is seen from Bangladesh Household Income and Expenditure data that the average travel time to health care services was about 35 minutes in 2000 and 2005 and 14 minutes in 2010. About 89% people who have received health care services traveled less than an hour to the service, 7 % of them traveled more than an hour but less than two hours and only 3 % traveled more than 2 hours. So, nearly 96% of the people suffering have accessed to health

**Figure 3: DISTRIBUTION OF RESPONDENTS OVER TRAVEL TIME TO HEALTH CARE****Figure 4: DISTRIBUTION OF RESPONDENTS OVER WAITING TIME FOR SERVICE**

services within the WHO approved time frame of two hours.

From HIES data, more than 99 percent of the patients waited less than an hour and around 3 percent of the patients waited for an hour or more. The average time waited was about 17 minutes in 2000 and 2005, and waiting time for consultation decreased to 8.50 minutes in 2010. The improvement in health and issues related to health like travel and waiting time is due to policies relating to health and infrastructures. Bangladesh has improved rural village road to commute to union and Upazila health complexes, which lessens the travel time significantly. Expanded Program on Immunization (EPI) successfully averted death resulting from infections in Bangladesh. Globally, immunization programs avert 2 to 3 million death and in Bangladesh it has averted about 2 million death from 1987 to 2000 (Sarkar, Sarker, Doulah, & Bari, 2017). According to Sarkar et. al. national full immunization coverage in Bangladesh was 81 percent in 2013, whereas in India it was 74% in 2012. The Water and Sanitation Program (WSP) wing of the World Bank revealed that

Bangladesh lost 6.3 percent of GDP due to inadequate sanitation and it has made remarkable progress in WASH-water, sanitation access, and hygiene. In Bangladesh, 98 percent of the population gets drinking water from technologically improved sources and it has become successful in proving basic sanitation (World Bank, 2017). Hand wash program in schools and Community Based Nutrition component of Bangladesh Integrated Nutrition Project provides supplementary feeding to malnourished children, pregnant women and lactating mothers improved birth weight, maternal and child nutritional status (World Bank, 2005) and help decrease child mortality, infant mortality and maternal mortality rate in Bangladesh.

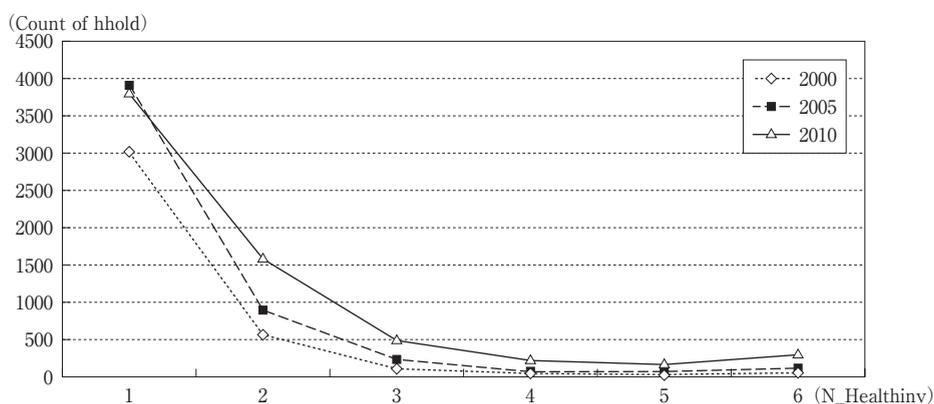
### 4.3 Household Expenditure in Human Capital

The human capital situation and its advancement despite public spending largely fell upon the households. The UNESCO Institute for statistics measures the heavy burden of education spending that falls on the families around the world and households in developing countries spend more on their children than in the developed countries. Private expenditure even for primary education made by the parent remain high which is a major im-

Table 5: Educational Expenditure of % of Households

Educational Expenditure	2000	2005	2010
Tk. <=500	20.8%	13%	5.7%
Tk. 501-1500	11.9%	13.1%	9.7%
Tk. 1501-2500	6.4%	7.3%	6.7%
Tk. 2501-3500	4.6%	5%	5.3%
Tk. 3501-5000	4.7%	5.4%	6.1%
Tk >=5001	14.6%	18.5%	31.7%

Figure 5: DISTRIBUTION OF HOUSEHOLDS OVER RANGES OF HEALTH INVESTMENT



1 = less tk. 500, 2 = tk. 501-1500, 3 = tk. 1501-2500, 4 = tk. 2501-3500, 5 = tk. 3501-5000 and 6 = more than tk. 5000

pediment to achieving the standard of free primary and secondary education to all set by Sustainable Development Goals (Huebler & Legault, 2017).

According to Huebler and Legault household expenditure increases sharply when students reach secondary education. They have found that household spend \$87 per child in primary education in Ghana, \$151 in Cote d'Ivoire and \$680 in El Salvador annually and this figure reaches \$228 for secondary education in Ghana. Moreover, out of pocket health expenditures burden the household even more. Around the world, nearly 32 percent of the health expenditure of a country comes from households (WHO, 2019). In Table 5 and Figure 5, household expenditure made in education and health is shown. In Bangladesh, average household expenditure on education is increasing steadily.

In 2000, average household expenditure on education was 2638 Taka,<sup>2)</sup> in 2005 and 2010 this average expenditure increased to 3524 Taka and 10735 Taka respectively (average expenditure health and education calculated for the households that spend on health and education). About 85 percent of households in 2000, 81 percent of households in 2005 and less than 70 percent of households in 2010 made education expenditure below 5000 Taka, indicating that the fraction of households making education expenditure beyond Tk. 5000 is increasing. Out of pocket health expenditure made by households in Bangladesh is low. On average, households spent 278 Taka and 373 Taka in 2000 and 2005, and then average health expenditure in 2010 rose steeply up to 1282 taka. About 95 percent of the households made expenditure on health less than 2500 Taka in 2000 and 2005, and in 2010 the fraction of households that made the same level of expenditure dropped to 90 percent.

## 5. Conclusion

In Bangladesh people aged 10-19 had 5.13 years and people aged 20-29 has 5.65 average years of education in 2010 and then on average year of education decreased with the increase of age. Among the people aged 10 and above, 39.5 percent were illiterate, about 10 percent were literate, 35.6 percent had primary and some secondary education, and 12 percent had secondary and higher secondary education, with 3.5 percent tertiary education in 2010. The incidence of suffering illness decreased among the people aged 10 to 40 and average health and education expenditure increased over the period 2000 to 2010. Good health and well-being and quality education are two goals set by Sustainable Development Goals and to be achieved by 2030. During the period over 2000-2010, average years of schooling among the people aged 20 to 29 increased about 1.5 year and more than 5 % more of the population have primary and some secondary education compared to 2000. Given the human capital situation in 2010, rising education and health expenditure, the Sustainable Development Goals (SDGs) of good health and well-being and quality education,

the aspiration to be developed country by 2041 is an uphill challenge.

In 2010, about 32 percent of the households spent more than Tk. 5000 on education and the fraction of households spending more than Tk. 5000 on health is on the rise; if the out of pocket investment made by households on health and education increases, it will disadvantage the poor households in regards to human capital accumulation and may perpetuate poverty because human capital expenditure impoverishes households (Nguyen et al., 2012). Bangladesh has graduated to the status of lower middle-income country and to be a developed country, Bangladesh needs to develop its human capital stock to the level that other developed countries had just before their economies took off. Malaysia and Thailand had gross secondary enrollment rates of 68 and 76 percent in 2009 and average rate of secondary enrollment rate in upper middle-income countries is 83 percent and 101 percent in high income OECD countries (Jimenez et al., 2012). This rate is only 54 percent in Bangladesh (World Bank, 2018). South Korea achieved 100 percent gross enrollment rate in primary education in the 1970s, in secondary education during 1995 and in tertiary education in 2000 (Jimenez et al., 2012). In East Asia and the Pacific, less than 10 percent of the work force had primary education, more than 20 percent had middle/ secondary education, and about 40 percent had higher school education during 2000–2004 in the manufacturing sector (Ribound et al., 2007). So, to increase the quality and quantity of human capital stock for sustaining growth and development, Bangladesh should invest more on Human capital.

This paper tried to show the evolving scenario of human capital and policies resulting in the improvement of the human capital situation in Bangladesh. Bangladesh in recent years is experiencing sustained growth and according to World Bank country Director for Bangladesh and Bhutan, Bangladesh is expected to experience strong growth. To achieve its growth vision, Bangladesh requires a highly productive economy and human capital development that is responsive to labor market demand. In this respect, our next plan is to see whether the development of human capital, particularly the educational attainment, improved the indices of multidimensional poverty like income, health and well-being in Bangladesh.

#### Notes

- 1) An administrative unit within a District
- 2) Currency of Bangladesh

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