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Research Article

Achieving Universal Health Coverage Through Health Insurance: The Case of Readymade Garment Industry's Employees in Bangladesh

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Abstract

Aim: this study aims at assessing the contribution of health insurance for the employees of selected garment factories in reducing OPP in terms of% of total costs of medical treatment, identifying the problems of health insurance and claim realisation and developing a model for the effective health insurance, which is expected to contribute in achieving Universal Health Coverage (UHC). *Subject and Methods*: The study has been conducted on the employees of selected garment factories which have introduced health insurance scheme for their employees and the garment factories which have not yet introduced health insurance for their employees. Both qualitative and quantitative approach has been applied to collect the data from employees, management officials of the readymade garment (RMGs) industries and concerned insurance companies to meet the objectives of the study. Questionnaire survey on the employees of the selected garment factories, in-depth interview, focus group discussions (FGDs) with the stakeholders has been conducted. *Results*: Health insurance of RMGs has not got momentum yet. It is at the initial stage only. At this stage, the study finds that health insurance can reduce OPP relating to benefit package, claim realization, follow up treatment etc. The employers and the employees face several problems. Moreover, monitoring and supervision need to be ensured. *Conclusion*: Most of the employees are not aware of their rights and terms and conditions of health insurance, despite of having such problems, health insurance can contribute to the reduction of OPP of the employees under HI. By reducing OPP, HI contributes to the expansion of health care coverage. By expanding the outreach, health insurance can contribute to achieving the goal of UHC, provided that the health insurance policies are well-designed.

Keywords

Health Insurance, Universal Health Coverage, Readymade Garment Industry, Out of Pocket Payment

1. Introduction

The world leaders committed to ensure universal health coverage (UHC) by 2030 in the general assembly of the UN in 2015. Members states reaffirmed this commitment at the United Nations' General Assembly (UNGA) high level meeting on UHC in 2019 [44]. The national governments also enacted laws, formulated policies and strategies to reach

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the targets of UHC. The 'UHC' as the World Health Organisation [44] means that all individuals and communities receive the health services, they need without suffering financial hardship [19]. It includes the full spectrum of essential, quality health services from health promotion to prevention, treatment, rehabilitation, and palliative care across the life course.

Ensuring basic facilities including medical care is one of the constitutional responsibilities of the Government of Bangladesh (Article 15a of the Constitution of the People's Republic of Bangladesh) [27]. Bangladesh has formulated 'Health Policy, 2011' to ensure basic health services for the people and developed 'Financial Strategy 2012-2032' to achieve UHC by 2032 [3, 17]. Bangladesh is one of the rare examples of health service network from grassroots level to central level to provide health services [4, 5]. Primary health care services are provided at 13,000 community clinics (CC) located at villages for every 2000 population, 5000 satellite clinics at over 5000 Unions, secondary level health services are provided at more than 500 Upazila level hospitals [15]. Tertiary health services are provided at district level hospitals and medical college hospitals. Private sector also plays a major role in providing health services. Health services at private hospitals are much more expensive and beyond affordability of the people below poverty line [6, 10]. In addition to public and private hospitals, NGOs, INGOs and voluntary organisations also provide health services (*ibid*). Despite the availability of such pluralistic and multi-dimensional facilities for health services, the coverage in Bangladesh is below that of other Asian countries.

The poor people usually are not willing to visit doctors for ordinary or any common diseases for medical treatment, they are afraid of high costs for treatment and they visit doctors only at the last moment when they have no alternative to visit doctors for treatment [8]. In such cases, many of them do not get fully recovered and many of them have to pay high cost for catastrophic health hazards, because of which many of them revert to poverty [7, 9]. For such catastrophic health expenditure, millions of people fall into poverty every year in Bangladesh.

This study has been conducted on the employees of selected garment factories which have introduced health insurance scheme for their employees and the garment factories which have not yet introduced health insurance for their employees. Both qualitative and quantitative approaches have been applied to collect the data from employees, management officials of the readymade garment (RMGs) industries and concerned insurance companies to meet the objectives of the study. Questionnaire survey on the employees of the selected garment factories, in-depth interview, focus group discussions (FGDs) with the stakeholders has been conducted. The data includes benefit package (disease coverage and other benefits) of health insurance, costs of benefit package and premium schedule based on age and life span, procedure, and problems of claim realisation. Descriptive statistics has been applied to analyse data. The main objective of this study is to assess the contribution of health insurance to achieving the goal of universal health coverage considering the RMG employees as a case study. Thus, the specific objective of this study is to assess the amount of contribution of health insurance (HI) to the total cost of treatment for employees of RMGs as a patient of in-patient department (IPD) and out-patient department (OPD) care of hospital under the benefit package. This paper also tries to calculate the amount of out-of-pocket payment (OPP) of the employees of both under and not under HI to compare the contribution of health insurance. This study has tried to investigate the list of diseases and other contribution under the benefit package (list of disease and other support such as consultation fees, investigation charges, medicines follow up and disease maintenance costs etc.) offered by the insurance companies by examining the amount of benefit package. The aim was to figure out whether the cost of benefit package has been estimated as per standard official protocol. The paper tries to highlight problems of health insurance including the problems of claim realization by the clients. This paper also explores the challenges of HI in Bangladesh to reduce out of pocket payment and financial hardship of the people living below poverty line (BPL) due to catastrophic health expenditure.

1.1. Significance of Health Insurance to Achieve UHC

UHC means that all individuals and communities receive the health services they need without suffering from financial hardship. It includes the full spectrum of essential, quality health services, from health promotion to prevention, treatment, rehabilitation, and palliative care across the life course [44]. Health insurance is not a panacea for achieving UHC rather it is worldwide perceived that it substantially contributes to reduce out of pocket payment in case of catastrophic health hazards [34, 38]. It is a process of pooling resources, risks and sharing risks in which resources of all subscribers are mobilised and risks are shared. Bangladesh has less than 1% coverage under health insurance [33], which is lowest in the south Asian countries. As of 2020, approximately 29,500 employees from 16 factories had enrolled in the HI scheme that was to be piloted by SNV, BRAC and CARE [35]. No in-depth study covering the root causes of low level of insurance, problems of insurance policies, strategies, claim realisation process. Now it has become a research issue to assess the effectiveness of health insurance in Bangladesh, the result of which would contribute to develop a need-based, demand oriented model of health insurance that can facilitate to reduce poverty and to achieve the goal of UHC. This study will cover the benefit package, cost coverage and premium of health insurance of employees arranged by the owners of the selected garment factories, contribution to the reduction of out of pocket payment of the subscribers, challenges of

implementation of insurance policies only. It will not focus any other issues relating to insurance management achievement of UHC.

1.2. Challenges of Universal Health Coverage

Universal health coverage (UHC) is an emerging priority of health systems worldwide and central to Sustainable Development Goal 3 (Target 3.8). Critical to the achievement of UHC, is the quality of care. UHC is based on the WHO Constitution of 1948, which declares health a fundamental human right and commits to ensuring the highest attainable level of health for all [41, 42] Universal health coverage means that all people have access to the health services they need, when and where they need them, without financial hardship. It includes the full range of essential health services, from health promotion to prevention, treatment, rehabilitation, and palliative care [43].

Current evidence suggests that quality of care is suboptimal, particularly in low- and middle-income countries [45]. Globally, health care expenses push 25 million households each year towards abject poverty. Almost 2 billion people are facing catastrophic or impoverishing health spending [42, 8]. It is estimated that in Bangladesh alone, catastrophic health expenditure results in 5.7 million Bangladeshis being forced into poverty [32]. Health care financing issues remain a key agenda in global health policy. Rising health care costs and the large share out of pocket expenses appear as among major hurdles for the poor to break out of poverty [30].

Financial hardship of the people especially the people below poverty line in developing countries continue to be a fundamental challenge for UHC [24, 9]. On financial hardship, people living in poorer households and in households with older family members (those aged 60 and older) are more likely to face financial hardship and pay out of pocket for health care [21, 23].

Inequalities continue to be another fundamental challenge for UHC as aggregated data masks within-country inequalities in service coverage. Even where there is national progress on health service coverage, the aggregate data mask within-country inequalities. For example, coverage of reproductive, maternal, child and adolescent health services tends to be higher among those who are richer, more educated, and living in urban areas, especially in low-income countries
(https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc).

Monitoring health inequalities is essential to identify and track disadvantaged populations in order to provide decision-makers with an evidence base to formulate more equity-oriented policies, programs and practices towards the progressive realization of UHC.

Better data also are needed on gender inequalities, socioeconomic disadvantages, and specific issues faced by indigenous peoples, populations in economic crisis (*ibid*). knowledge gaps remain, particularly related to monitoring and evaluation, including of equity [45].

1.3. Out of Pocket Payment and Health Insurance

Out-of-pocket (OOP) expenditure is a cost for health care that are paid by individuals at the time of treatment through user fees, co-payments and direct payments. It is the most common way of paying for health services in developing nations particularly in low and middle-income countries. OOP payments are typically perceived to be the most regressive instrument of health finance and high reliance to it create a significant financial barrier in accessing health care [10]. The main determinants of OOP health expenditure are age, gender, place of living, education and income level, household size and presence of comorbidities, marital status, insurance status, payments for medical supplies and pharmaceuticals and distance to health facilities, household expenditure, household profile, family size, Presence of chronic illness/ chronic diseases (ibid).

Health insurance (HI) and out of pocket payment (OPP) are strongly associated. Health insurance reduces OOP expenditure on health by 2.0% and OOP expenditure on medicine by 2.4% amongst the general population [1] while increasing the OOP expenditure on health by 0.2% and OOP expenditure on medicine by 0.2%, once income of the insured rises (*ibid*).

Despite the presence of risk-pooling in health financing mix and low prevalence of OOP expenditure, OOP expenditure for health care is still widely used in a form of co-payment to the health insurance or used to get health services or supplies (pharmaceuticals, medical devices etc.) that are not covered by the existing health insurance or government subsidy [10, 39].

Out-of-pocket payment is one of the indicators measuring the achievement of Universal Health Coverage. World Health Organization suggests that for countries from the Asia Pacific Region, out-of-pocket payments should not exceed 30%-40% of total health expenditure [36, 20]. Health insurance reduces average out-of-pocket payments by about 21% (P <.001). Using private health facilities incurs more out-of-pocket payments than public health facilities (P <.001) [36, 37].

Health insurance is a contract between a company and a consumer. The company agrees to pay all or some of the insured person's healthcare costs in return for payment of a monthly premium [20] Health Insurance is conceived of as the pre-payment for anticipated risks of catastrophic health hazards with a view to minimise out of pocket payment (OPP) [38]. The rests of the total costs are shared by the subscribers [3]. It is a process of pooling resources, and sharing risks in which resources of all subscribers are mobilised and risks are shared. It is anticipated that all subscribers will not fall sick

and even not at a time, all diseases will not have same costs, thus everyone is expected to be benefitted. Through this process of insurance, resources and communities are mobilised. It is recognized that some form of insurance involving risk-pooling and 'pre-payments' could be an effective mechanism to ensure universal health coverage [43, 42].

Health insurance is a type of benefit that is offered by a government agency, a private enterprise, or a not-for-profit organization [26]. To determine the cost, a provider estimates a population's collective medical bills and then divides that risk among policy subscribers [31]. In theory, subscribers know that one individual may experience significant unexpected bills while another may not. The cost is then distributed among a group of people in order to make health care relatively cheaper for the greater good of all [42].

The incurrence of continually increasing high healthcare expenses amid the COVID-19 pandemic by Bangladeshi citizens now recognizes the need for insurance support, and an overwhelming amount of corporate and individual clients are approaching subscribers in search of suitable products [16].

Bangladesh has maintained approximately 90,000 life insurance policies against a population of over 160 million, and of those, less than 10% of life insurance subscribers have any health coverage [26].

Currently, the insurance business offers two forms of health coverage: standalone health insurance policies and life insurance policies that include health coverage [16, 2]. In Bangladesh, only non-life subscribers are permitted to offer standalone health insurance coverage. However, they receive a significantly lesser share of the overall yearly health insurance premium than private-sector enterprises did when they began in the late 1990s and early 2000s.

1.4. Universal Health Coverage: Bangladesh Perspective

The Article 15(a) of Bangladesh's constitution has distinctly recognized healthcare as a fundamental right of all citizens, and it has been stipulated by the Article 18(1) that raising nutrition level and improving the quality of public health should be a top priority of the state. Bangladesh has formulated 'Health Policy, 2011' to ensure basic health services for the people and developed 'Financial Strategy 2012-2032' to achieve UHC by 2032 [17]. Bangladesh has the health service network from grassroots level to central level to provide health services. Primary health care services are provided at 13,000 community clinics (CC) located at villages for every 2000 population, 5000 satellite clinics at over 5000 Unions, secondary level health services are provided at more than 500 Upazila level hospitals [11-13]. Tertiary health services are provided at district level hospitals and medical college hospitals. Private sector also plays a major role in providing health services. Despite these well-defined provisions, universal healthcare in Bangladesh remains a distant dream [24, 26].

Universal health coverage (UHC) ensures that all people can have access to quality health services without financial hardship. Paying for healthcare is one of the main reasons why people fall into poverty in Bangladesh. In addition, many people, especially the poor, are afraid of the high costs which healthcare inflicts and do not seek medical attention at all. In Bangladesh, less than 1.0 per cent of the population has a health coverage scheme which protects them against catastrophic health expenditures [3, 14]. In Bangladesh, approximately 3.8 per cent of the total population, or 6.0 million people, are pushed into poverty because of out-of-pocket payments for health services every year. Bangladesh needs Universal Health Coverage because it has a direct impact on health of the people [33].

Research from 2016 over the last seven fiscal years suggests that budgetary allocation for health dropped from 6.2% to 4.3% of total government expenditure. 2017 data from the Research Institute for Social Transformation (RIST) reveals that the per capita health expenditure in Bangladesh stands at USD 32 – almost half that of India (USD 111) [21].

Bangladesh has made substantial progress over the last two decades. Bangladesh is a country that has seen remarkable health improvements since gaining independence in 1971, and has evolved from being a "basket case", to an exemplar of "good health at low cost." However, still 64 per cent of health expenditure are made out of pocket [17] which is very alarming. As a result, thousands of poor households are being pushed into poverty which we call catastrophic expenditure. Bangladesh is experiencing the highest. 15 per cent catastrophic expenditure whereas India is experiencing around 10-12 per cent and Thailand is experiencing lower than 2.0 per cent [18, 22].

Most of the people in Bangladesh are rarely willing to pay to be insured against any risk, health, and/or accident and these insurances have historically been associated with international travel, only because many nations do not allow entry without such a policy [25]. While the state has subsidized public sector healthcare, a policy push for health insurance is simply not there, and the concept of insurance support only began gaining some traction in the late 1990s, according to statements by several insurance experts. The issues of health insurance coverage are population coverage, financial coverage, disease coverage, age, gender, poor vs. non-poor, diseases (CD, NCDs), inpatient-outpatients, chronic diseases, accidents, skills, affordability of human resources, policies, systems, strategies, investigation, medicine, partial-full coverage, partnership, building confidence, making claim process simplified, ensuring payment, determining premium, determining costs for treatment, etc.

The International Centre for Diarrhoeal Disease Research, Bangladesh (Icddr, b) ensures health-care for its employees with a health insurance scheme including contributions from staff members. Bangladesh Rural Advancement Committee (BRAC) has recently initiated health insurance for its employees against a premium of BDT 150 (USD 1.80) per

month. In the private corporate sector, Grameen Phone among others secure health-care for its employees with contributions from the employer [21].

Despite the examples of pooled funds above, it needs to be emphasized that such funds correspond to a very small proportion of the total health-care fund of Bangladesh [30].

1.5. Expanding Health Coverage in Bangladesh

Despite health is the priority of the state, as of 2020 around 2.63% of its GDP is spent on health [40], and the allocation for the health sector in the proposed budget for the 2023-24 fiscal year has been reduced to approximately 5 percent of the national budget from 5.4 percent in the outgoing fiscal year (The Daily Star, 01 June 2023). Out of pocket payment as of 2022 is 64% of total health expenditure, which is the highest in the South Asia. Health insurance has been recognised as one the effective means to reduce OPP, expand outreach, enhance benefit coverage and ultimately to achieve UHC. Developing and middle-income countries like Thailand, Indonesia, Rwanda, South Africa and many other countries have positive experience in mobilising resources and expanding health service coverage by introducing national health insurance policy. Introducing national health insurance policy as an initial stage, for the people below poverty line and for the employees, for the wage earners (corporate clients) can be one of the effective strategies to expand universal health coverage.

2. Methodology

This study has applied multiple approaches and methods for in-depth analysis of contribution of health insurance in reducing out of pocket payment (OPP) for catastrophic health hazards of the subscribers, problems of claim realisation and the challenges of implementation of policies of health insurance in meeting stated study objectives. For this purpose, RMG industries, those have introduced health insurance schemes for their employees, and concerned insurance companies and RMG industries those have not introduced any insurance schemes for their employees as cases have been selected. The employees of the selected RMG industries have been studied to compare the effectiveness of health insurance. Employees under the insurance coverage, and employees not covered by insurance, concerned management officials of the selected RMG industries and selected insurance companies have been studied.

This study has been designed to assess the contribution of health insurance to OPP of the subscriber-employees, explore the benefit package, premiums, claim realisation process, subscriber's view about insurance system, identify the problems relating to implementation of insurance policies and strategies. Relevant segments of RMG employees are the population of this study. Employees of the RMG industries covered under health insurance by their employers and the employees not covered by health insurance are the population of this study. Officials of RMG introducing health insurance, Officials of RMG not introducing health insurance, Officials of concerned insurance companies, Officials of MoH&FW, DGHS, HEU, IHE of Dhaka University and Hospitals are also the population of this study.

This study has applied mixed method as it is believed that these mixed methods are likely to add insights as it is considered most effective. This is a mix of qualitative and quantitative study and unequal weightage have been given to qualitative and quantitative data, data have been collected consecutively and conclusion have been drawn through the process of triangulation of sets of data collected from multiple sources.

Two sets of data for qualitative and quantitative will not be mixed up or merge to each other, rather two sets of data have been analysed separately and the results have been integrated. The data have been analysed separately for each set of the data and the results of both qualitative and quantitative data have been integrated to draw conclusion on the effectiveness health insurance in achieving UHC.

Methods of this study include in-depth interviews with the management officials of selected RMG Industries and insurance companies, FGDs with the key stakeholders e.g. officials of ministry of health services, departments, service providers and questionnaire survey have been applied. A structured questionnaire with an open-ended section have been applied to collect data from the employees have been developed.

2.1. Conceptual Framework

To the best of our knowledge, there is hardly any universal theory for achieving universal health coverage. But several concepts, models, strategies, policies exist to achieve UHC. Health schemes like Social Health Protection Scheme {*Shasthya Surokha Karmasuchi*, (SSK)} is available under health economic unit (HEU) of Bangladesh. Community-based programmes, health insurance, partnership programmes of the government, private sector, NGOs, INGOs, voluntary organisations have been developed, which also contribute to achieve the goal of UHC [28]. Insurance business and benefit packages are complex and multi-dimensional, which are related to population, age (life span), diseases, nature and severity of diseases, financial coverage (partial, full or partnership), individual, group and health related other factors, income, expenditure, household profiles etc. National health insurance (NHI) policy with an affordable premium based on income level of the population strata can contribute to UHC by reducing out of pocket payment (OPP) [18].

Conceptual framework of this study has been developed based on the review of existing literature, experiences of health insurances across the countries. Health insurance policy with an affordable premium based on income level of the population strata can contribute to UHC. In this conceptual

framework, health insurance premium is the independent variable (IV), health service coverage is the dependent variable (DV), and monitoring mechanism of the government is the moderating variable (MoV) and compliance is the mediating variable (MeV). Other factors that influence the coverage include affordability to pay premium, willingness, trust or evidence of benefits, governmental/employer/other support for premium payment will also be considered.

In this conceptual framework, health insurance (HI) is the independent variable (IV), out of pocket payment (OPP) is the dependent variable (DV). Only these two variables have been considered for this study.

HI includes benefit package, claim realisation and compliance, benefit package includes list of diseases, consultation fees, investigation charges, hospital charges (surgery, stay in hospital), medicine, diet, follow up treatment and other costs to be covered [25, 29].

Conceptual framework of the study shows the relationship between benefit packages consisting of lists of diseases and estimated standard cost for medical treatment as per official standard protocol, calculations of premium based on age, life span, costs of diseases, investigation, medical treatment, consultant's fees, medicines and other related costs that can be covered by insurance policies. The conceptual framework of this study can be shown as follows

$$OPP = f(HI)$$

Where

OPP stands for out of pocket payment for medical treatment expenditure and HI for health insurance.

HI includes benefit package, compliance, claim realization and other factor,

Benefit package includes the list of diseases to be covered, consultation fees, investigation charges; costs of stay in the hospital for surgery or any other heal hazards, medicines, diets, instrumental support, cost of follow up treatment and other factor such as access to public hospitals. Thus, the model has been formulated as under OPP. This depends on the list of diseases covered, consultation fees, investigation charges, hospital charges for surgery, stay in hospital, medicines, diet, follow up treatment, Claim Realization, Compliance, Other Factors.

2.2. Data Output

This study has covered 11 ready-made Garment (RMG) industries which have not yet introduced health insurance and 07 RMGs that have introduced HI for their employees. A total of 342 employees (201 not covered by HI and 141 covered under HI responded to questionnaire survey, and organized five FGDs and five discussions with the officials of RMGs and other stakeholders. A total of 52 stakeholders participated in the discussions and FGDs. The field survey and interviews of this study were conducted from January to April 2024.

A total of 201 employees not covered by health insurance of 11 RMGs have responded to the questionnaires about their diseases, treatment, and medicines. Out of 201 only 69% (table 1) respondents mentioned that they usually go to pharmacy to buy medicine in case of common diseases such as fever, pain, cold, coughing etc. Only 20% respondents mentioned that they go to doctor (RMG medical centre) and only 2.53% went to public hospital for treatment of complicated disease such as heart problem, stroke, gallbladder, problem etc.

Table 1. *Distribution of Respondents by Nature of Treatment.*

What you do in case of your / your Spouse/child/children have	Go to				Don't go to doctor
	Doctor	Pharmacy	Public hospital	Pvte hospital	
1.0 Common/ordinary diseases					
Fever, Coughing, cold, Allergy etc.	40 (20%)	139 (69%)	6 (2.53%)	3 (1.26%)	13 (6.3%)
Diarrhea/ Dysentery	13 (6.33%)	126 (63%)	8 (3.80%)	8 (3. 80%)	45 (23%)
Other ordinary sicknesses	8 (3.80%)	32 (16%)	13 (6.33%)	6 (2.53%)	142 (71%)
2.0 Chronic & prolonged complex diseases					
Diabetes	0 (0%)	3 (1.26%)	6 (2.53%)	0 (0%)	192 (96%)
Blood pressure	5 (2.53%)	3 (1.26%)	3 (1.26%)	3 (1.26%)	186 (94%)
Asthma/Prolonged Asthma	0 (0%)	0 (0%)	3 (1.26%)	3 (1.27%)	195 (97%)
TB	0 (0%)	0 (0%)	0 (0%)	0 (0%)	201 (100%)
Arthritis	5 (2.53%)	3 (1.27%)	3 (1.27%)	0 (0%)	193 (96.3%)
Kidney Problems	0 (0%)	0 (0%)	0 (0%)	0 (0%)	201 (100%)

What you do in case of your / your Spouse/child/children have	Go to Doctor	Pharmacy	Public hospital	Pvte hospital	Don't go to doctor
3.0 Complex Diseases					
Tumor/Cyst/Polyp etc.	0 (0%)	0 (0%)	0 (0%)	0 (0%)	201 (100%)
Cancer	0 (0%)	0 (0%)	0 (0%)	0 (0%)	201 (100%)
Heart problems	0 (0%)	0 (0%)	0 (0%)	0 (0%)	201 (100%)
Stroke	0 (0%)	0 (0%)	0 (0%)	0 (0%)	201 (100%)
Liver problem/Jaundice	0 (0%)	0 (0%)	0 (0%)	0 (0%)	201 (100%)
Others	0 (0%)	0 (0%)	0 (0%)	0 (0%)	201 (100%)
4.0 Sexually Transmitted Diseases					
Gonorrhea/ Syphilis	0 (0%)	0 (0%)	0 (0%)	0 (0%)	201 (100%)
5.0 Others					
Impotence	0 (0%)	0 (0%)	0 (0%)	0 (0%)	201 (100%)
Pregnancy/Common female disease	1 (0.63)	0 (0%)	1 (0.63%)	0 (0%)	201 (100%)

It appears from the table 1 that up to 69% employees do not go to doctor rather go to pharmacy for medicine in case of ordinary diseases and up to 3.80% employees go to public hospital for common diseases and 3.80% also go to public and private in case of diarrhoea. Table 2 states that only 2.53% (4) respondents visited doctors for consultation during last six months. Only 2.53% had to get admission to hospital for treatment. The rests of the respondents did not visit doctor nor get admission to hospital. For prolonged disease like diabetes, asthma, arthritis, cancer, heart problem 94-100% respondents reported that they didn't have such catastrophic and chronic disease during the last six months and they don't feel that they need to go to go to doctor for treatment.

Table 2. *Awareness of the Respondents about Health Insurance.*

Sl	Questions	Answer	
		Yes	No
1	Awareness of health insurance (HI)	38 (19%)	163 (81%)
2	Did any HI staff come to you?	3 (1.27%)	197 (97.73%)

The employees not covered under health insurance were asked, if they know about health insurance, its benefits and if the employers or any employee of Insurance Company came to them to offer health insurance policies. Table 2 shows that a total of 201 employees responded to the questions and out of 201 employees, only 19% (38) respondents mentioned that they heard about health insurance, 81.01% respondents mentioned that they don't know what health insurance is, while 98.73% reported that no employee of health Insurance/Insurance Company came to them to pursue the for-health insurance.

Table 3. Reasons for not taking any Health Insurance Policy (Frequency Distribution).

Sl	Reasons for not taking any health insurance policy	Freq
1	Complex process	29
2	Lack of confidence	37
3	No money to pay the premium	31
4	Payment of premium is difficult	34
5	Don't know about the procedure of health insurance	35
6	Uncertainty	35
7	Fear of getting money back	29
8	Fear of fraudulence	31
9	Others	00

3. Description

163 respondents (81%), mentioned that they did not know about health insurance and 38 respondents (19%) were aware only of the benefits of health insurance when they were asked about the reasons for not taking any policy of health insurance (Table 3). They were asked about common problems of insurance process, 29 respondents mentioned that the procedure of health insurance policy is complex, 35 mentioned that they don't know the process, 31 mentioned that they don't have money to pay premiums, 29 mentioned that they are not sure that they would get any benefits from the health insurance and 31 mentioned that they are afraid of fraudulent practices, employers did not introduce health insurance, while 35 reported that they were uncertain about the benefits of health insurance. Most of the respondents who know about health insurance have mentioned that they are afraid of above-mentioned problems and that is why they are not interested in taking health insurance policy. It appears from the data that employees lack confidence about the benefits of insurance and they are afraid of realising benefits of insurance. Thus, employer's role in introducing health insurance is the key factor. The management authority needs to inform the employees of the importance and benefits of health insurance. They should be briefed that every employee contributes a small amount of premium, the employer pays major part of the premium and this amount generates benefits for all employees. It is logical that all insurers will not fall sick at a time in catastrophic diseases. May be only a few may fall in catastrophic diseases. Through insurance risks of catastrophic disease is shared by all and generate benefits for all.

3.1. Data Analysis

The respondents to the questions of this study are mostly of the age group above 35 (age group is given in Table 7 and education of employees is given in table 8). Dita summary is given in table 4. It implies that age is correlated with the visiting doctors. The aged employees are more likely to visit doctors compared to the young employees. It is also evident that young employees usually do not fall sick and they do not need to go to doctors and they feel that they don't need any test and younger employees are less likely to fall sick compared to the elderly employees.

Total 141 employees under health insurance of 07 RMGs have responded to the questionnaires about their diseases, treatment, and medicines. Only 67.74% respondents mentioned that they go to pharmacy to buy medicine in case of common diseases such as fever, pain, cold, coughing etc. Only 24.19% go to doctor for common/ordinary diseases and 12.90% went to hospital for treatment of arthritis/joint pain, 8% - 9% go to doctors for ordinary diseases, while in case of respondents not under health insurance the rate is less than 6%. Mentionable, since the respondents have no chronic and catastrophic diseases, they do not feel to go to doctors or clinic or hospital for treatment.

Table 4. Data Summary.

Sl.	Items	Coverage		Total
		HI	Not HI	
1	RMGs studied	13	11	24
2	Discussion with the management officials	3	7	7
3	Employees surveyed	141	201	342
4	Male	89	112	201
5	Female	51	89	141
6	Employees of Age up to 30	87	114	201
7	Employees of Age 31-45	49	74	123
8	Employees of Age 45+	5	13	18
9	FGD with officials of RMGs	1	5	2
10	Discussions with the officials of Ins Companies	2	1	3
11	FGD with the MOH&FW, HEU, DGHS, IHE, Ins Co			4
12	Total number of participants of FGDs, discussions			52
13	Total respondents including the participants of FGDs, discussions			394

Table 5. Comparative Health Expenditure of Employees of RMGs by Age.

Sl.	Age Group	OPP of HH of employees not in HI			OPP of HH of employees under HI		
		No. of Employees	Average Monthly OPP	% of monthly HH Income	No. of Employees	Average Monthly HH OPP	% of monthly Income
1	Up to 30	114	150	1.36	87	70	0.64
2	31-45	74	260	2.26	46	90	0.78
3	>41-50	13	370	2.84	5	120	0.92
5	Total	201	3.88	6.5	141	1.98	2.33

Table 6. Diseases Covered Under Health Insurance.

Sl.	Nature of Diseases	Diseases Covered by	
		HI	Not under HI
1	Common/ Seasonal Diseases	Not all covered	Common diseases
2	Chronic Diseases	Not all Covered	Chronic diseases
3	Catastrophic Diseases	Only a few	
	Total		

3.2. Data Output on the Employees Not Under Health Insurance (HI)

General Information about employees not under HI is given here and this is to state that 11 garment factories were visited to

conduct field survey and 201 employees were given questionnaire to respond (Male: 112, Female: 89).

Table 7. Age Group.

Age Group	Up to 30	31-40	41-50	>50
Number	122	56	8	3
(%)	60.76	27.85	3.80	1.27

Table 8. Education of the Employees.

Educational Level	Up to Primary	JSC	SSC	HSC	Above HSC
Number	46	23	65	67	0
%	23	11.39	32.33	33.54	0

It appears from the data in tables 9 and 10 that the respondents under health insurance visit doctors and go to hospitals more frequently than the employees not under HI. It implies that employees under health insurance are more aware of their health. due to its process, benefits, and strategies of health insurance policy. The respondents were asked about the process of health insurance, process of claim realisation, and any problems relating to health insurance they faced. It appears from the table that no employee pays any money for HI, they do not know how much the employers pay as premium of insurance for them, what are the diseases, services, other facilities included in the benefit package. They mentioned that the health insurance company pays directly to the hospital, they do not re-reimburse any expenditure against treatment. The respondents mentioned a number of problems with health insurance. The most common problems are obtaining certificate from the designated medical officer from getting treatment in the hospital/clinic, they were not briefed about the total procedures of health insurance, what are the benefits, how many disease are covered under the health insurance.

Table 9. Treatment Management (Frequency Distribution).

Sl	Questions	Frequency	
		Yes	No
1	Visited Doctor in the last 6 months	118 (83.87%)	23 (16.12%)
2	Paid Consultation fees	49 (35.43%)	91 (64.51%)
3	Tests for Diagnosis	33 (24.19%)	106 (75.80%)
4	Paid for treatment	129 (91.93%)	11 (8.07%)

It appears from the table 9 that 118 (83.87%) respondents visited doctors at least for one time for treatment/consultations, 49 (35.48%) paid consultation fees, while only 33 (24.19%) have had various tests for diagnosis.

Table 10. Average monthly Cost for Treatment of the Respondents.

Cost indicator	Average cost (BDT)
Average consultation fee in the last six months	335.00

Cost indicator	Average cost (BDT)
Average investigations or tests (ultrasound, stool, blood, urine, endoscopy, blood sugar, and x-ray) cost in the last six months	1600.00
Total cost treatment in the last six months	6636.00
Average	1,106.00

Table 10 describes about average monthly expenditure for treatment of the respondents and their household members. It appears from the table that a respondent spends an average amount of BDT 335.00 in a month for consultation and BDT 1,600.00 for investigation for diagnosis and average monthly expenditure for treatment is BDT 1,106.00 only, which is <5% of of their average monthly income.

4. Discussion

Table 11 describes the current health problems of the respondent and their family members. It appears that the highest number of respondents 27 (19.56%) suffer from joint pain and back pain, while 9 (6.52%) employees have heart related problems, 12 (8.69%) suffer from asthma and high blood pressure and 3 (2.17%) have kidney related problems.

Table 11. *Treatment Record.*

Sl.	Health Issues	Yes	No
1	Did you go to doctors in last six month?	6 (2.53%)	194 (97.47%)
2	Did you go to doctors in last six month?	40 (20%)	-
3	Did you get admitted to hospital during the last six months?	3 (1.53%)	195 (98.47%)
4	Reasons for admission to hospitals	Numbers	
5	Gall bladder operation	0	201
6	Heart problem	0	201
7	Stroke	0	201
8	Liver problem	0	201
9	Kidney problem	0	201
10	Others (Pregnancy)	1	200

From tables 10, 11 and 12 it is evident that the average amount spent for joint pain and back pain is BDT 988.00, heart related diseases, stroke, kidney failure are more expensive and the amount for such complicated and expensive diseases ranges from BDT 1,000.00 to 5,000.00. 1.8 states the respondent's household monthly average income, expenditure and cost for medical treatment.

Table 12. *Monthly Average Income, Expenditure, and Treatment Cost (Amount in BDT).*

Sl	Income	Freq	Family Expense	Freq	Treatment Cost	Freq
1	< 9,000.00	0 (0%)	<9,000.00	2 (1.61%)	<1,000.00	82 (58.06%)
2	10,000.00-12,000.00	5 (3.54%)	<12,000.00	7 (4.83%)	<2,000.00	25 (17.74%)
3	12,000.00-15,000.00	7 (4.83%)	<15,000.00	9 (6.45%)	<3,000.00	9 (6.45%)
4	15,001.00-20,000.00	22 16.12%)	<20,000.00	57 (40.32%)	<5,000.00	9 (6.45%)

Sl	Income	Freq	Family Expense	Freq	Treatment Cost	Freq
5	>20,000.00	109 (77.41%)	>20,000.00	66 (46.77%)	>5,000.00	4 (3.22%)

Table 13 describes expenditure for medical treatment of the employees not covered by health insurance. The employees were asked if they went to doctor and spent for treatment during the last six months, only 3 (1.53%) respondents mentioned that they went to doctors, got admitted in the hospital and spent only less than BDT 2000.00 for treatment. 1.8 table also shows that the respondent's household income is less than BDT 9,000.00 but 1.61% have expenditure which is less than BDT 9,000.00. While 109 (77.41%) respondents have mentioned that their household income is more than BDT 20,000.00 and only 4 (3.22%) have spent BDT 5,000.00 for treatment. 82 (58.06%) respondents mentioned that they spend for his/her a family member's treatment, amount of which is less than BDT 1,000.00, while only less than BDT 2000.00 is spent for treatment.

Table 13. *Insurance Coverage and Cost Coverage for the Previous Six Months.*

Sl	Disease Covered	Total Cost	HI covered	OPP	% of OPP
1	Pain (9.83%)	883.00		883.00	100%
2	Blood pressure (3.27%)	275.00		275.00	100%
3	Cold cough/ cold fever (55.73%)	390.00		390.00	100%
4	Diabetes (1.63%)	2,000.00		2,000.00	100%
5	Diarrheal/ Dysentery (8.19%)	1,320.00		1,320.00	100%
6	Operation/Surgery (1.63%)	20,000.00		20,000.00	100%
7	Surgery for gallbladder stone (3.27%)	35,000.00	35000	0	0%
8	Others (18.03%)	1,756.00		1,756.00	100%

Tables 12 and 13 describe the total treatment cost and insurance coverage. It appears from 4.3.9 the table that 55.73% respondents mentioned that they spent for treatment of common disease like pain, cold, allergy, diabetes etc. of their own. It implies that health insurance does not cover such types of common diseases. Only 1.63% to 3.27% has undergone for surgery and 3.27% mentioned that the insurance has paid fully for removal of stones from the gallbladder through laparoscopy. One respondent has mentioned that he had gone for surgery and he had to pay in full for the surgery, which is BDT 20,000.00. Insurance didn't cover the cost for the surgery.

It appears from the data that only 1.53% of respondents had pathological or other tests for medical treatment and only one patient has got benefits for gallbladder surgery. However, others have chronic and hazardous health problem like joint pain, diabetes etc. but did not get any benefit from health insurance. It implies that these diseases are not included in the benefit packages.

Table 14. *Comparative OPP of Employees RMGs.*

Sl	Cost Indicators	Employees (in Taka)	
		With HI	Without HI
1	Monthly average OPP per person	160	270
2	OPP as% of total health expenditure	30%	100%
3	OPP as% of total income	10%	20%

Sl	Cost Indicators	Employees (in Taka)	
		With HI	Without HI
4	% of employees visiting doctors	30%	10%
5	% of employees visiting public hospitals (monthly)	3	1

It appears from above table (table 14) that the average amount of OPP an employee under HI spent in a month is BDT 160.00, while the amount of the employee not under HI is much higher, which is BDT 270. The OPP as of total health expenditure, total income for employees under HI and not under HI are 70%, 30% and 20% 10% respectively. The frequency of visiting doctors and clinic/hospitals is higher for the employees under HI compare to the employees not under HI. The data suggests that despite a number of problems, HI reduces not only the amount of OPP, also contributes to build awareness of health hazards.

The FGD also focused on establishing diverse sort of dashboard, which need to be developed so that the system will have more use based on the user perspective. Specific dashboards for health service provider, health analysts, facility and logistics managers and patients need to be designed by understanding and maintaining their specific use cases. Health information exchange module will be responsible for receiving and delivering any kind of data to an external/private system or organization. Identity and access management modules will be created for data access management and authentication of the external/private system. Health insurance management modules need to integrate for beneficiary enrolment, hospital empanelment, premium collection, fund management, claim management, reporting and consumer protection. A user with their unique Health ID will receive service from various healthcare service facilities. Users' health encounter data need to be collected regardless of provider in public or private facilities. The interoperability of the data with health information exchange can be established through various open source/closed source healthcare software systems. All systems will follow the standard data interoperability protocols to ensure data exchange between various systems. The Shared Health Records (SHR), compatibility with the Health Information Exchange need to be ensured.

5. Research Findings

After triangulation of data, this study has several key findings. It has been revealed from the study that health insurance increases the likelihood of utilizing healthcare and reduces inpatient out of pocket (OOP) expenditure of the employees of RMGs under health insurance. The average monthly out of pocket payment (OPP) for medical treatment of the employees of RMGs under health insurance is less compared to the OPP of the employees who are not under health insurance. Health insurance does increase patients' visits to primary care facilities; however, hospitals are still the main provider of healthcare.

Most of the employees spend less than 6% of their average monthly income for treatment. More than 66% employees are of age below 30. The employees of this age group are less likely to go to doctors. Employee and Employer's Contribution: Most of the employees under health insurance do not know how much the employer pays as monthly/quarterly/yearly premium for their health insurance. Benefit package does not cover many of the catastrophic diseases. RMGs are required to undertake life insurance policy for employees as mandatory for membership of BGMEA. Thus, all RMGs having membership of BGMEA have taken life insurance policy for their employees. RMGs pay pre-determined amount of premium for life insurance based on the number of regular employees. Under the life insurance the cost for treatment of employees due to accident during working at factories and or compensations for death in factory or due to accident in the factory are covered.

Out of 11 RMGs 9 have medical centers with doctor, nurse and attendant. Employees get primary health services from the center. However, for any critical or catastrophic health hazards, employee needs to go outside for treatment. Some RMGs have collaborative arrangement with private diagnostic centers and or private clinics from where the employees of the RMGs get at least 30% discount of total costs for investigation and other treatment facilities available in those hospitals/clinics. Benefit package under health insurance does not include many of the common catastrophic diseases, chronic diseases such as liver disease, etc. Collecting certificate from the assigned medical officer of the RMG to get medical services under health insurance, A number of documents are required for claim realization; claim realization process is complex and long. Costs for required other services such as medicines, investigation, follow up consultations and treatment, staying in hospital beyond specified time are not covered under health insurance policy. Not aware of the benefits of the health insurance. Health insurance process is complex Inability to pay premiums. Employees under HI faced with very high medical bills, owing to limited coverage of benefit package, Out of pocket payment (OPP) for health expenditure of the employees of RMGs varies with the age, gender, income. Employees of

age below 30 years have the least expenditure on health or medical treatment, while expenses increase with the age. Employees of age above 45 have the highest level of expenditure. This study also reveals that most of the employees don't go to doctors in case of common disease. However, the employees under health insurance coverage are more likely to visit doctors for treatment. It implies that the employees under health insurance are more concern about their health and diseases than the others.

6. Conclusion

Health insurance of RMGs has not got momentum yet. It is the beginning only. At this initial stage, the study finds that health insurance can reduce OPP relating to benefit package, claim realization, follow up treatment etc. The employers and the employees face a number of problems. No monitoring and supervision are ensured. Most of the employees are not aware of their rights and terms and conditions of health insurance, despite of such problems, health insurance can contributes to the reduction of OPP of the employees under HI. By reducing OPP, HI contributes to the expansion of health care coverage.

By expanding the outreach, health insurance can contribute to achieving the goal of UHC, provided that the health insurance policies are well-designed. Regarding this matter benefit package needs to include well-defined multiple options with the coverage of common catastrophic diseases, costs of subscriber as a patient of both IPD and OPD. This kind of benefit package needs to include medicine, consultations, investigation, follow up treatment, diet, instruments, Employer's and employee's contribution needs to be clearly defined and calculated by making this public to build confidence of the insurers. Furthermore, claim realization process needs to be made simple and the number of required documents need to be minimized. At the same time, time-bound claim payment needs to be ensured. Employees are needed to be motivated to get health insurance policy Health insurance for the employees of RMGs in Bangladesh needs to be made mandatory by enacting law or by making required provision in the prevailing law. A committee comprising of the representatives of the concerned ministries, IDRA, DGHS, RMGs and Insurance Companies may be formed to monitor and ensure compliance.

This study recommends that National Health Insurance Authority may be established for all categories of people to achieve UHC. Research findings strongly suggest that policymakers should continue to advocate policies aimed at achieving UHC in coming years. This study also suggests that despite persistence of several problems health insurance is still one of the best alternative ways to reduce OPP and catastrophic health expenditure for achieving universal health coverage in Bangladesh.

Abbreviations

BDT	Bangladeshi Taka
CC	Community Clinic
GDP	Gross Domestic Product
FGD	Focused Group Discussion
HI	Health Insurance
INGO	International Non-Governmental Organization
NGO	Non-Governmental Organization
IPD	In-Patient Department
OPD	Outpatient Department
OOP	Out of Pocket Payment
RMG	Readymade Garments
UHC	Universal Health Coverage

Conflicts of Interest

I have no affiliations with or involvement in any organization or entity with any financial interest for this paper.

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