



# Effect of Voucher Scheme on Maternal Health Care at Bhola District in Bangladesh

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## Abstract

*The aim of this study is on “Effect of Voucher Scheme on maternal health care at Bhola District in Bangladesh” to find the overall views and situations of maternal health. The issues of health and nutrition have achieved a laudable success in Bangladesh, especially within health related MDGs where Infant or Child Mortality rate and Maternal Mortality rate have changed in significantly than many other developing countries. The study examined the effectiveness of Maternal Voucher Scheme on maternal health care in Bhola district.*

*The study also examined the important components of maternal health in Bhola district by the utilization of maternal health Voucher Scheme, which is known as demand side financing (DSF) and it is a simple mean of payment which ensures the purchasing power of the poor with the freedom of choice and efficiency. In this study, an attempt has been made to find out situation changed by Voucher Scheme in antenatal, delivery and postnatal period. By this study it has found that Voucher Scheme increases skilled birth attendance and institutional delivery among poor women by giving effective services.*

*Then it is now cleared that Demand side financing not only promotes equity through improved access and better targeting of subsidies, but also provides incentives for efficiency and provider choice to get services; they need in their maternal time.*

**Keywords:** Demand Side Financing, Voucher Scheme, Antenatal Care, Delivery Care, Postnatal Care, Bangladesh Maternal Mortality Survey.

## 1. Introduction

### 1.1 Introduction

Demand-side financing (DSF) scheme is popularly known as the maternal health voucher programme, which is introduced in many developing countries of the world including Bangladesh a intervention of developing overall health status. In other way, Voucher scheme is a simple mean of payment which ensures the purchasing power of the poor with the freedom of choice and efficiency, reduction of uncleared labour, reduce administrative burden and quality services. A voucher scheme was introduced for low-income, pregnant women to enhance the utilization of maternal and child health services and the highlighted demand generation among



the poorest women combined with lowering financial barriers to accessing institutional delivery care meeting quality standards are likely to be important in lowering maternal mortality in Bangladesh. The scheme covered the cost of Antenatal care (ANC), delivery and Postnatal care (PNC) as well as care of sick children. Maternal mortality remains a major challenge to health systems worldwide. Global initiatives to intensify policy intervention for maternal mortality began with the safe Motherhood Initiative in 1987. (M. C. Hogan et al. 2010). On the Contrary, DSF is a form of subsidy and it directly provides purchasing ability to consumers on certain publicly provided goods such as health and nutrition. (Midhet and Becker, 2010)

Now it can be said that Demand side financing is increasingly being proposed as one of the options to increase access to reproductive and child health services and is generating great interest in a number of developing countries. Demand side financing not only promotes equity through improved access and better targeting of subsidies, but also provides incentives for efficiency and provider choice by involving the private sector. Proper utilization of these health facilities for ANC, delivery and PNC services can reduce maternal mortality and morbidity significantly. However, the utilization of maternity care provided by trained professionals during and after delivery is alarmingly low in Bangladesh. Many factors contribute to the utilization of health facility in developing countries at the time of obstetric complication and childbirth. (K. T. Keya, et al. 2013). Healthcare financing is a major concern for developing countries like Bangladesh. Massive voids in effective financing mechanisms render the health system of Bangladesh to be highly reliant on out-of-

pocket (OOP) payments. In 2010, Bangladeshi people spent USD 23 per capita on healthcare annually and of total healthcare expenses 64% was bore by OOP payments (WHO, 2011). This grim picture renders Bangladesh to greater misery along with other developing Asian countries (Doorslaer, 2007).

World Health Organization (WHO) had recommended four strategic interventions which are known as “four pillars” for safe motherhood; they are- family planning, antenatal care, clean/safe delivery and emergency obstetric care (WHO-1996). Antenatal care is a key strategy for reducing maternal and neonatal morbidity and mortality rate because adequate utilization of antenatal health care services is associated with improved maternal and neonatal health outcomes. (Onasoga et al. 2012).

In health sector, Antenatal care is an important determinant of high maternal mortality rate and one of the basic components of maternal care on which the life of mothers and babies depend. Systematic antenatal care was first introduced early in the 20th century in Europe and North America and is now almost universal in the developed world. A number of studies have identified lack of ANC as a risk factor for maternal mortality. (N.Nisar and White, 2003).

However, Maternal Health care voucher scheme is basically provided the poor women after and before pregnancy. Those women who are not able to survive the cost of their maternal health care to ensure proper health care. So, The Maternal Health care Voucher Scheme’s aim is to reduce the financial barriers faced by poor women in maternal period, and increases the demand for institutional services in childbirth.



Reducing maternal and child mortality is an important goal of the Millennium declaration and a major concern for policy makers in developing countries. One of the important barriers to reducing maternal mortality is the low utilization of maternal health services provided by the public health system through supply side mechanisms. The Government of Bangladesh initiated the Maternal Health Voucher Scheme to reduce the financial barriers faced by poor pregnant women.

The Government of Bangladesh piloted a demand-side financing (DSF) scheme (popularly known as the maternal health voucher program) in 21 upazilas (sub-districts) from 2006 and expanded to 33 upazilas in 2007. (Koehlmoos et al. 2008). The selected poor women under DSF scheme receive a package of essential maternal health care services, as well as treatment of pregnancy and delivery related complications. This program also provides supply side financing to service providers. This program has been expanded to another 11 upazilas in 2010. For Increasing the demand for maternal health services was one of the principal objectives of the pilot programme.

## 1.2 Statement of the problem

Bangladesh, after all, has achieved a remarkable success in reducing maternal and child death, then still in rural Bangladesh, around 71% of births take place at home. Home delivery is preferred as it is associated with low cost and delivery care at facilities is considered only for emergency obstetric care (EmOC). Bangladesh is predominantly a rural country and also Bangladesh, being a low income country with a vast majority of its people living in poverty. Here, utilization of skilled attendants at delivery almost three times less in rural areas

compared to urban areas and also it is seven times less among the poorest (9%) compared to the richest (63%) households. Borrowing, using household savings, and financial assistance from relatives were also found to be important sources in paying for the delivery care. But it is not properly distributed among those who basically needed the financial assistance in their maternal period for that Antenatal, Postnatal and Delivery services provided very low and as per the result of this maternal and child death and malnutrition conditions arouse in the overall health in Bangladesh. On the other hand, The primary barriers to delivering in a health facility operate at the financial and family levels: poor women have a clear preference for maternal health services from the private sector, which are perceived to be of higher quality, but cannot afford to pay for delivery care; husbands or mother-in-laws often do not support delivery in a health facility. (Agha and Carton, 2011)

## 1.3 Objectives of the study

- The aim of this study was to examine the influence of vouchers on the utilization of maternal health care at Bhola district in Bangladesh.
- To find how to reduce the financial barriers faced by poor women in accessing maternal healthcare, and increase the demand for institutional services in childbirth.
- Identify the private and Non-Government Organization (NGO) facilities for providing quality maternal health care to poor pregnant women.
- To compare the effect of Voucher Scheme on Maternal Health Care in relation to the Non-Voucher Scheme receivers.



## 1.4 Justification of the Research

In Bhola District, Specially Monpura, Tajmuddin and Daulatkhan Upazilas where there are not available private and public Clinic or Hospital so that Voucher Scheme can reduce the complexity of Transport cost, Antenatal Care, Postnatal Care, Delivery Health care and it can increase the total number of institutional delivery to reduce maternal and child mortality and overall health burden in the those areas. In health sector, DSF has a possible role in the delivery of certain sub-optimally and inequitably consumed services (e.g. maternal care) and betterment of unmet health behaviors. (Gopalan et al. 2012).

The necessity of this research is very important because of developing the livelihood, socioeconomic conditions and reducing maternal-infant mortality. If the research can find the total scenario of those areas, then the next steps will take carefully by government and Non-government organizations specially developing in the health sectors to ensure the maternal and child health care services. DSF's importance primarily lies on its scope to integrate various human development approaches and advance individual and societal capabilities. Under DSF, overall human development occurs as it addresses populations' social, environmental and economic risks or vulnerabilities. (Agha and Carton, 2011).

## 2. Methodology

### 2.1 Data collection Tools and Techniques

The data was collected by a structured interview among the Voucher Scheme recipients and Non-voucher scheme receivers to compare the voucher scheme

facilities and services and the improvement of health status of those health and health conditions' of their ANC, PNC and delivery care period. The quantitative and qualitative techniques were conducted to collect the data for this study. A structured questionnaire with some open-ended questions was developed for data collection which covered the following: socio-demographic and religious variables among the Demand Side Financing (DSF) Maternal Health care Voucher receivers and Non-Voucher Scheme receivers who conducted for individual interviews.

Before the collection of data, the respondents were provided a little note about how to answer the questions. They were forbidden to discuss while answering. With the full agreement of the respondents the data was collected. All interviews were recorded in quantitative and qualitative methods by individual interviews.

All quantitative and qualitative data analyzed in SPSS 16 and Excel 2007 to demonstrate the effect of DSF upon utilization of maternity care services through Univariate analysis, Bivariate Analysis and Multivariate logistic regression Analysis.

### 2.2 Study area

Bhola district (sub-division) in Bangladesh is one of the low per capita income districts where most of the people have to do very hard working for survive their livelihood. Fishing and Day laboring are the common professions of the district.

Bhola was established under Noakhali district in 1845. At that time its administration centre was at Amania of Daulatkhan. The sub-division was included in Barisal district in 1869. The





sub-division was then consisted of Daulatkhan and Burhanuddin Hat Thanas and three outposts such as Taltali, Gazipur and Tazumuddin. The sub-divisional head quarters was shifted from Daulatkhan to Bhola in 1876. It was elevated to a district on 1 February 1984. The district now consists of 7 upazilas, 60 union parishads, 409 mouzas, 460 villages, 5 municipalities, 45 wards and 62 mahallas. The seven upazillas are Bhola Sadar Upazila, Burhanuddin Upazila, Charfasson Upazila, Daulatkhan Upazila, Lalmohan Upazila, Manpura Upazila, Tazumuddin Upazila.

### 2.3 Sample size

The study was conducted among the 300 married and pregnant women basically or had any children. Randomly respondents of the study had selected among voucher scheme receivers or Non- voucher scheme receivers with having any children or pregnant. The most of the part of this study would conduct in Monpura Upazila, Tazumuddin Upazila and Daulatkhan Upazila.

### 2.4 Study Design

A cross group study design applied in this study. Data were collected on age, parity, the educational status of women and their husbands, the socioeconomic status of households including household expenditures and the use of health services during the last pregnancy. A mix of Qualitative and Quantitative methods was utilized to collect data. 300 married women age group 15-49 interviewed randomly in very depth, those women who are pregnant now or delivered very recently as primary data but the secondary data sources such as Bangladesh Demographic Health Survey (BDHS), Bangladesh Bureau of Statistics (BBS) and different authentic organizations' data also

used to analysis the data and also the Quantitative analysis (Univariate, Bivariate, Multivariate and logistic regression analysis and also Cross group analysis) methods used to finalize the study result.

### 2.5 Data Processing and Data Analysis

When the data was collected, the entire questionnaires were checked and verified. First, it was conducted a descriptive analysis of respondent's sample characteristics and husband's characteristics. Second, there was conducted bivariate analysis using the Chi-Square test to determine which demographic and educational characteristics are associated with each of the outcome variables of interest. Statistical Package for Social Science (SPSS), version 16.0 was used for data analysis.

After collecting data from field interview, data editing and entry in the Statistical Program for Social Science (SPSS) were done manually. Then the data were analyzed with the help of SPSS program and MS-Excel. First the data were analyzed using SPSS software. Then graphs and table were drowning with the help of MS-Word and MS-Excel.

In SPSS analysis was done in three stages. First, descriptive statistics such as frequency, percentage, mean and standard deviation etc. were used to explore the socio-demographic characteristics of the sample. Second, bivariate analysis and chi-square test were performed to examine the association between or among categorical variables.



## 3. Literature Review

Maternal Health care voucher has played a significant role in health sector of any country of the world where the voucher mechanism used. Vouchers are a specific demand-side financing mechanism that can be used to target essential health services to vulnerable populations such as poor, pregnant women and to protect them from catastrophic expenditures such as emergency obstetric care. (Ahmed and Khan, 2010). On the other hand, it was said that DSF intends to transfer purchasing power to the poor to choose services directly from the accredited providers while the providers are reimbursed for their services from a special fund (Standing, Peters, and Varghese 2003). The selected beneficiaries under the pilot maternal health DSF scheme in Bangladesh receive a package of essential maternal health care services, as well as treatment of pregnancy and delivery related complications. In addition, the beneficiaries receive cash incentive of Taka 2,000 (US\$29) for availing of safe delivery either in the facility or at home in presence of skilled birth attendant. They are also entitled to receive transportation cost of Taka 500 (\$7) from home to the Upazila Health Complex (UHC), and additional Taka 500 (\$7) for out-going referral to the District Hospital. This amount is disbursed in the form of unconditional cash grants. Besides, conditional cash transfer in the form of a gift box of about Taka 500 (\$7) is provided to the pregnant women for safe delivery by accredited providers. The DSF scheme also allocates top-up funds to facilities, which are proportionately divided among staff and a facility maintenance fund. Generally, 50 percent of the top-up funds are deposited in the "seed fund" from where associated expendable costs are incurred. Thus, the

DSF for maternal health care in Bangladesh is a combination of supply-side incentive for providers and demand-side cash transfer for clients. (Rob et al. 2011).

In a voucher scheme, the consumer receives a booklet or token that covers all or part of the price of a package of services. (PSP-One). Because they are highly targeted, voucher interventions are expected to improve health outcomes among the poor.

The healthcare-seeking pattern at childbirth varied quite considerably between the groups. The large majority of women with an obstetric complication delivered in a private hospital. In contrast, very few women who gave birth without any complication in a health facility did so in a private hospital. The private sector catered almost exclusively for women in need of emergency care.

The example could be best that Households in which the woman had a complication had a higher annual household expenditure and monthly income than the normal delivery group. Moreover, there were marked differences in the level of a woman's education. Just over half of those with a severe complication and almost two-thirds of the women in the less-severe group had attained class eight or higher while only just over one-third of the women with a normal delivery had the same level of education.

The findings of the study provide no indication of whether the welfare of families with severe and less-severe complications suffers more compared to families with normal deliveries due to economic pressure during the six-month period of the study. Even so, it is anticipated that the long-term shocks



resulting from such expenditure for poorer families would benefit by greater financial protection for maternal complications. Borrowing money from the informal sector may be a disaster for these families. A government-sponsored voucher scheme that now covers expenditure for delivery and maternal care for poor women will likely help in these cases. The voucher scheme has its own limitations but it may protect poor families from financial losses to some extent and may help these families protect themselves from the hands of local money-lenders. Otherwise, expenditure could lead to borrowing from these money-lenders, thus putting lands and goods at risk. Although the universal coverage to pay for maternal illness is desirable, the more target-oriented strategy using vouchers for the poor to cover the expenditure of maternal illness is likely to be more sustainable. Finally, financial protection is needed for the poorest to encourage the use of facilities for delivery and prevent families from impoverishment. (Hoque et al., (2012).

Voucher programs are intended to achieve a number of policy goals: i) by reducing financial barriers, they can increase access to services generally, and reduce inequities by making them affordable to the poor and other underserved groups; ii) by accrediting several providers to offer the service at the same price, they can increase choice for clients; iii) by including more than one provider, competition for clients with vouchers can increase efficiency in delivery and possibly reduce prices further; and iv) by requiring a minimal level of quality to be accredited to redeem vouchers, quality of care can be improved. (Rob et. al, 2011)

Bhatia et al.(2006) showed that voucher scheme could be an option for increasing the utilization of reproductive and child health services in India. In the Yunnan

Province of China, a voucher scheme was introduced for low-income, pregnant women to enhance the utilization of maternal and child health services. This scheme covered the cost of antenatal care (ANC), delivery and postnatal care (PNC) as well as care of sick children. Findings show that voucher distribution has increased the utilization of treatment for childhood diarrhea among the poor. (Kelin et al.)

In Mexico, families are encouraged to obtain preventive health care, participate in growth monitoring and nutrition supplements programs and attend health education programs to be eligible for cash transfer. The study findings suggest that the cash transfer component is associated with better outcomes in child health, growth and development. (Fernald et al. 2010).

In 2004 the Ministry of Health and Family Welfare (MOHFW), Government of Bangladesh, with technical support from World Health Organization (WHO), developed a maternal health voucher scheme. The overall goal of the DSF Maternal Health Voucher pilot is to achieve MDG target for reducing maternal mortality. The purpose of the pilot is to increase utilization of quality maternal healthcare services particularly by poor women from designated providers in selected upazilas through demand side subsidies. The Directorate General of Health Services (DGHS) of the MOHFW, under the Health, Nutrition and Population Sector Program (HNPSP), embarked on piloting the DSF scheme in initially in 21 upazilas and expanded it to 33 upazilas by 2007. (Koehlmoos et al. 2008).

DSF introduces two key changes in the public financing of such goods and services. First, it entitles the government to be a supplier of purchasing power to



consumers instead of being a direct service provider. Secondly, it tunes financing as 'output-based' than 'input-based' and hence links the subsidy or its objective with the beneficiary. DSF operates on the principal-agent theory, where the principal (government, donor or community) transfers funds to an agent (consumer) conditional on a defined action. (GTZ. Workshop Report ,2008). Primarily it caters to under-served areas, populations and services. Its underlying principle is to synergize the supply-and demand-sides through additional demand generation and supply strengthening. Thus, DSF links various supply-and demand-side measures (e.g. service provision and community awareness) with differential financing approach. It also harnesses the private sector potential and promotes innovative pooling and transfer of funds. As of now, among the various health needs, DSF has predominantly focused on millennium development goals (MDG). (Gopalan et al. 2012).

Progress in the decline of maternal mortality has been disappointingly slow in Pakistan. (Midhet & Becker ,2010 and Agha & Carton 2011). Even well-funded maternal health projects have failed to increase skilled birth attendance among the poorest women. (Mahmood A. 2010) The government has not moved beyond the traditional supply-side approach to the provision of maternal health services through public sector outlets. The inadequate status of existing public sector facilities in Pakistan, with poor management and the poor quality and availability of products and services has contributed to low service utilization rates. (A Norway-Pakistan Partnership Initiative, 2008 and Zaidi & Bhutta , 2009). Increasing the proportion of women who deliver in a health facility can be an important means in reducing maternal

mortality in low-income settings. It is globally recognized that one of the main challenges to achieving the Millennium Development Goal (MDG) of a global reduction of maternal death by 75% by 2015 (United Nations, 2000). There is the low proportion of women who deliver with a skilled birth attendant. (Hussein et al. 2004). Deliveries in health facilities can ensure that women are attended by skilled personnel and also link women to the referral system in the case of any complications. In many low-income settings with a high burden of maternal deaths, few women use facilities for birth, often choosing a higher-risk birth at home, often without professional medical assistance. Past studies have identified several reasons why women or families may choose home-delivery as a preferred option and a number of access barriers to using facilities as well. In all countries of the world, there are some women who choose to deliver in health facilities and who are seemingly able to overcome the known access barriers. Demand-side financing improves health seeking behaviour of beneficiaries. As per the studies, DSF improved health seeking behaviour on various health aspects such as maternal care, child care, vaccination and adult health check-ups. Evidence also indicated that DSF induced certain adverse consumer behaviour in the Latin American context since there were instances of increased fertility rate and intake of high calorie food among beneficiaries. (Fernald et al. 2009 and Stecklov et al. 2007).

Uganda and Bangladesh are both low-income countries, facing similar reported levels of maternal mortality, which also represent very different national contexts. Uganda is an East African nation of mixed religious and ethnic backgrounds. It obtained independence from Britain in 1962 but was soon engulfed by civil wars





that lasted until 1986, when the current government took power and brought stability to most of the country. The civil wars destroyed much of the health infrastructure (Dodge and Wiebe, 1985) and the country has been slowly rebuilding since its end (Dodge CP, 1987 and Macrae et al. 1996). Bangladesh gained independence in 1971 after a liberation war with Pakistan.

Voucher Programs where in a purchaser contracts accredited health facilities and vouchers are distributed to patients entitling them to services at those facilities. The voucher is either heavily subsidized or free for the patient, and the provider is reimbursed for the cost of service provision plus a reasonable profit after service delivery has been verified. (Bellows et al. 2013).

Reviews of the Evidence Summit show that financial incentives can enhance demand for and improve the supply of maternal health services—a finding that is true across instruments and geographic locations. Some programmes also show improvements in quality of care. Evidence on the impact on health outcomes and equity is weak, and few evaluations describe details of design and implementation. Moreover, in many studies, it is difficult to isolate the incentive effect from the many other potential confounding factors. On the whole, however, the evidence suggests that financial incentives can enhance utilization of maternal healthcare services, quality and equity, if programmes are carefully designed and implemented. More robust impact evaluations are needed complemented with qualitative studies to understand how stakeholders respond to incentives and the processes that lead to impact as well as to identify problems and corrective actions to improve project

implementation. A more comprehensive and consistent methodology for measuring the quality of MH services would also help ensure that studies capture meaningful (and comparable) measures of quality. For decades, governments and health systems have tried various approaches to enable women to utilize health services that facilitate healthy pregnancy and delivery outcomes. The Evidence Reviews strongly suggest that a range of supply- and demand-side financial incentives can enhance utilization and quality of maternal health services. Improving the evidence to inform appropriate use of financial incentives for maternal and neonatal health requires more methodologically-robust studies designed to assess attribution, sustainability, cost, equity, and outcomes. (Morgan et al. 2013).

Although Bangladesh made commendable improvements in uptake of maternal care services over the period between 1995 and 2010, our results demonstrated that the very low utilization of ANC, PNC and Skilled birth attendance (SBA) among poorer and less-educated women, as well as those living in rural areas, remains a major impediment to further improvement in reproductive, maternal and child health outcomes. Thus, priority focus should be given on implementing and evaluating multi-sectoral interventions to improve access to and quality of care for women who are poorer, less-educated and live in rural areas in the post-MDG health and development agenda for achieving universal health coverage, as there is considerable potential for improvement among these groups. (Van de Poel et al, 2014).

Voucher schemes increased deliveries in health centres and, to a lesser extent, improved antenatal and postnatal care. However, schemes that targeted poorer women did not appear to be efficient since



these women were more likely than less poor women to be encouraged to give birth in a public health-care facility, even with universal voucher schemes. (Committee for Development Policy, 2009). Voucher Scheme increases the access of ANC, delivery and PNC services of poor women.

## 4. Findings and Result

The finding of this study started with the descriptive statistics such as frequency; percentage, etc. were used to explore the demographic, socio-economic and cultural characteristics of the sample. The variable found most significant in the univariate analysis, subsequently adding the next significant variable one after the other. In bivariate analysis, it is used the Chi-square test between categorical variable to identify associations with Voucher

Scheme and other variables. In multivariate analysis, all of the antenatal, delivery and postnatal services and issues were used to compute their mean and high and low rank and logistic regression analysis also used to determine the found exceptional issues at future. In variables found statistically non-significant ( $>0.05$ ), not meaningful and no relationship with other independent variables with the outcome, were removed from the analysis of finding the final result of this study model.

### 4.1 Univariate Analysis

Table 1 shows the sample characteristics of all 300 respondents of the study where 53 Respondents are Voucher Scheme receivers and 247 Respondents are Non-Voucher Scheme receivers. Majority (69.7%) of the respondents were 18-25 age group and under 18 years respondents are 4.0% but 26.3% of the respondents are above 25 years old. 53.7% of the respondents that means 161 respondents are primary level education receivers. 7.0% respondents are no education.

Secondary and Higher education receivers are respectively 30.0% and 9.3% only. Most of the respondents' occupation is housewife counted as 98.0% but others 2.0% of the respondents are involved in agriculture or farming works. 87.0 % of the respondents' income level is 0-1000 category but 13.0% respondents in 1001-2000 categories. Most of the respondents (94.0%) of this study were Muslims; only 18.0% were from the Hindus.

**Table 1 Sample Characteristics**

Name of the Variables	Frequency	Percentage (%)
Receive Voucher Scheme		
Yes	53	17.7
No	247	82.3
Respondent's Age		
<18	12	4.0
18-25	209	69.7
25+	79	26.3
Respondent's Education		
No Education	21	7.0
Primary	161	53.7
Secondary	90	30.0
Higher	28	9.3
Respondent's Occupation		
Housewife	294	98.0
Agriculture/ Framing	6	2.0
Respondent's Income		
0-1000	261	87.0
1001-200	39	13.0
Respondent's Religion		
Islam	282	94.0
Hindu	18	6.0
<b>Total (N)</b>	<b>300</b>	<b>100</b>

**Figure 1: No. of Voucher Scheme Provider**

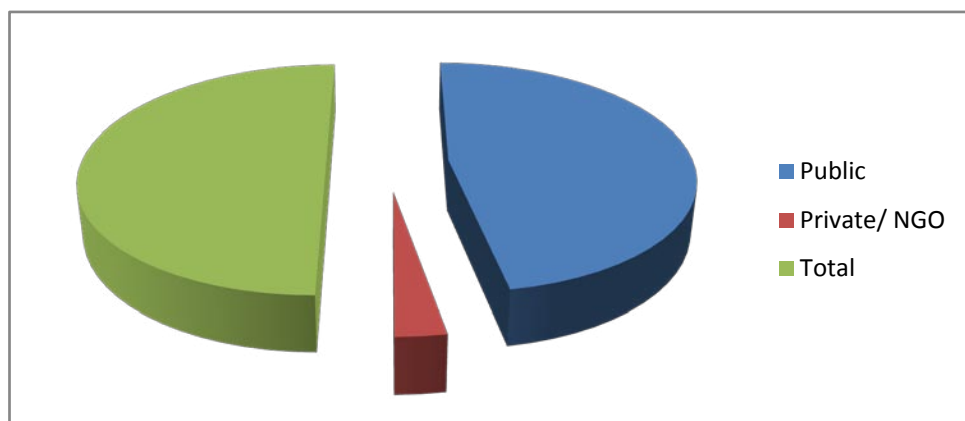




Figure 1 shows the number of Voucher Scheme Provider. Total received Voucher Scheme 53 out of 300 respondents where 16.7%% of the respondents are provided

Voucher Scheme by Government but only 3 (1.0%) of the respondents are provided Voucher Scheme by Private or Non-government organization.

**Figure 2: Respondent’s delivery condition**

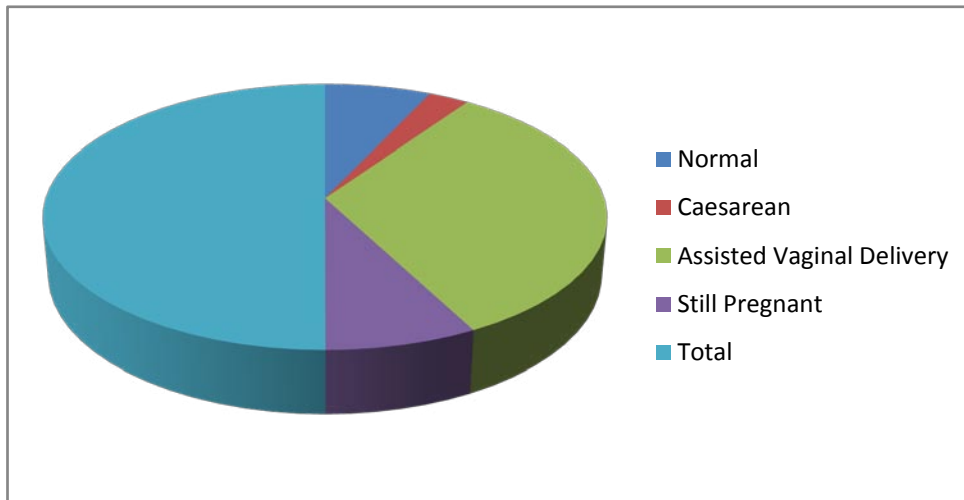


Figure 2 shows the respondent’s delivery condition. Normal delivery 14.0%, Caesarean delivery 5.3%, assisted vaginal

delivery 65.3%, Still pregnant 15.3% out of 300 respondents of this study.

**Figure 3: Voucher Scheme Provider Visit, Council & Advice**

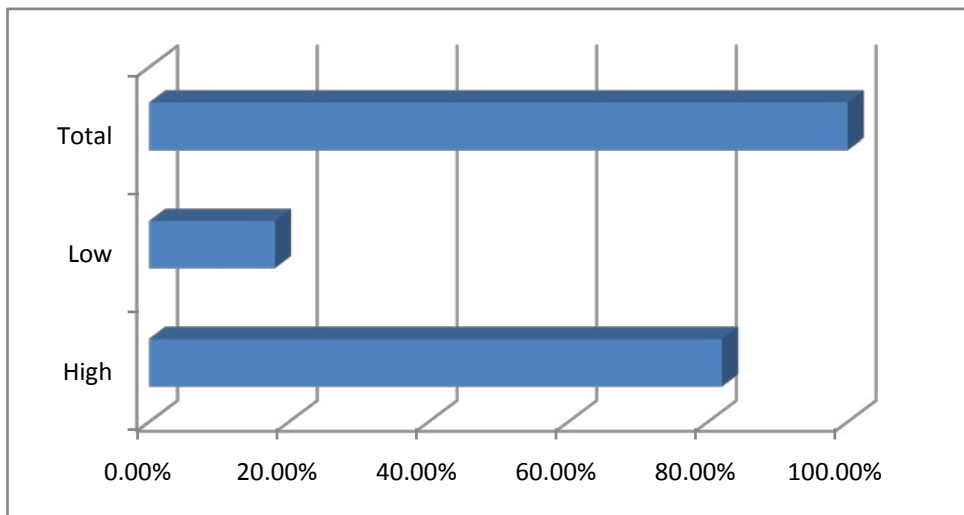


Figure 3 shows the Voucher Scheme Provider’s Visit, Council & advice to the receivers of the total respondents. It

estimated high 82.0% and low 18.0% of the total respondents.



**Figure 4: Last delivery place**

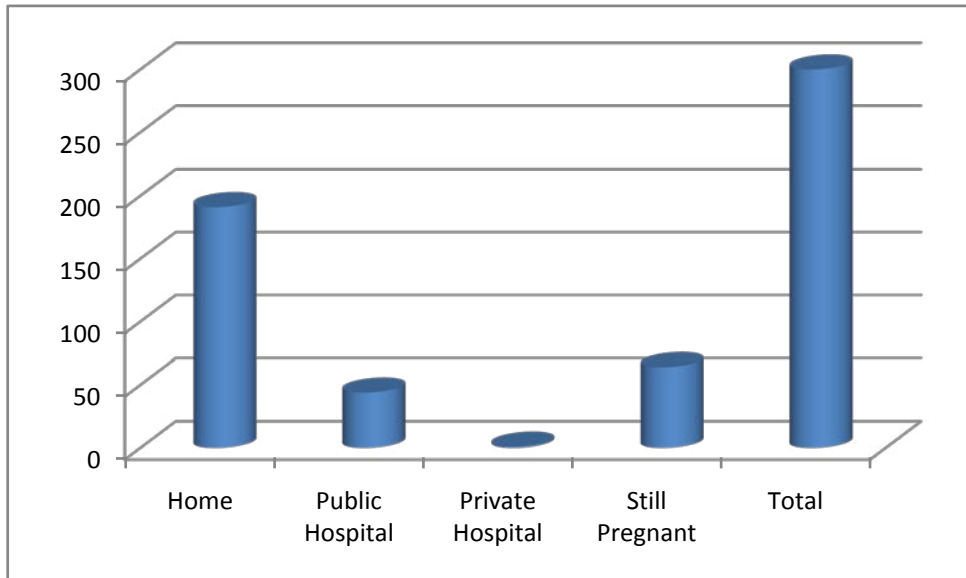


Figure 4 shows the last delivery place of the respondents where 63.7% at home, 14.7% at public hospital, 0.3% at private

hospital and still pregnant is 21.3% of the 300 total respondents.

**Figure 5: Provided year of Voucher Scheme**

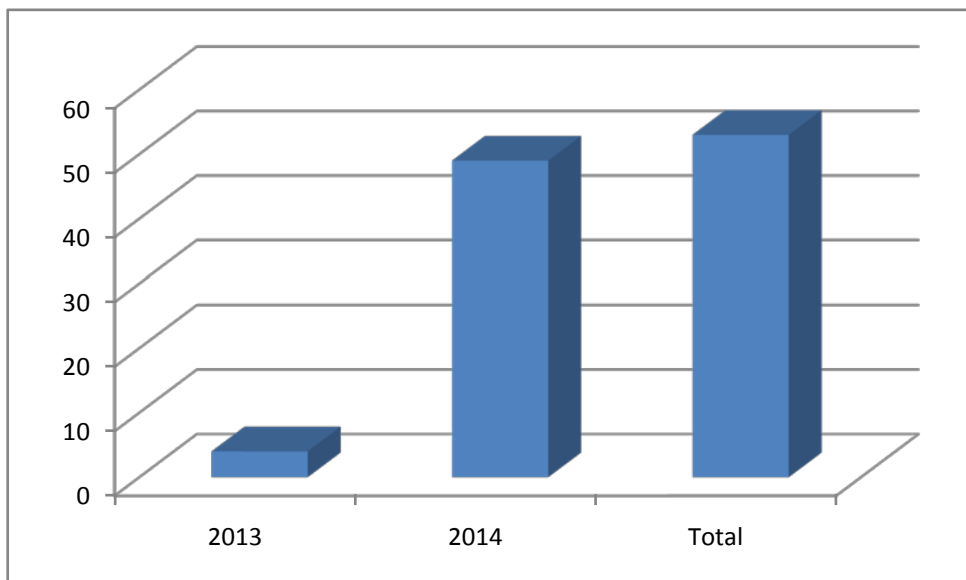


Figure 5 shows the provided year of Voucher Scheme where 1.3% in 2013,

16.7% in 2014 and in total 53 (7.7%) of the total respondents 300.

**Figure 6: Respondent’s opinion on Infant Mortality**

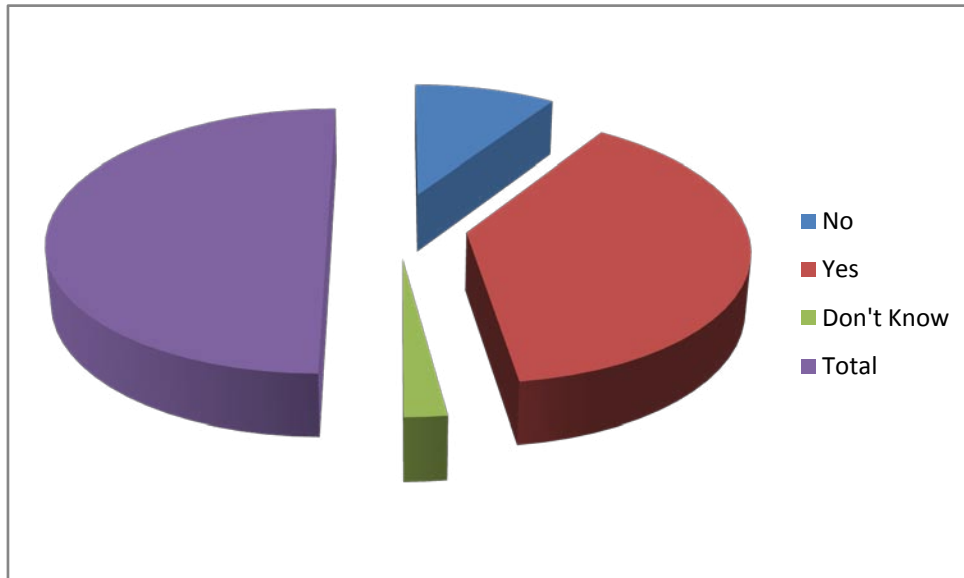


Figure 6 shows the Respondent’s opinion on Infant mortality where 18.7% of respondents answered Voucher Scheme did not reduce infant mortality, 77.0% of respondents answered Voucher Scheme

reduced infant mortality and 4.3% of respondents did not know the Voucher Scheme reduced or did not reduce infant mortality.

**Figure 7: Respondent’s opinion on Maternal Mortality**

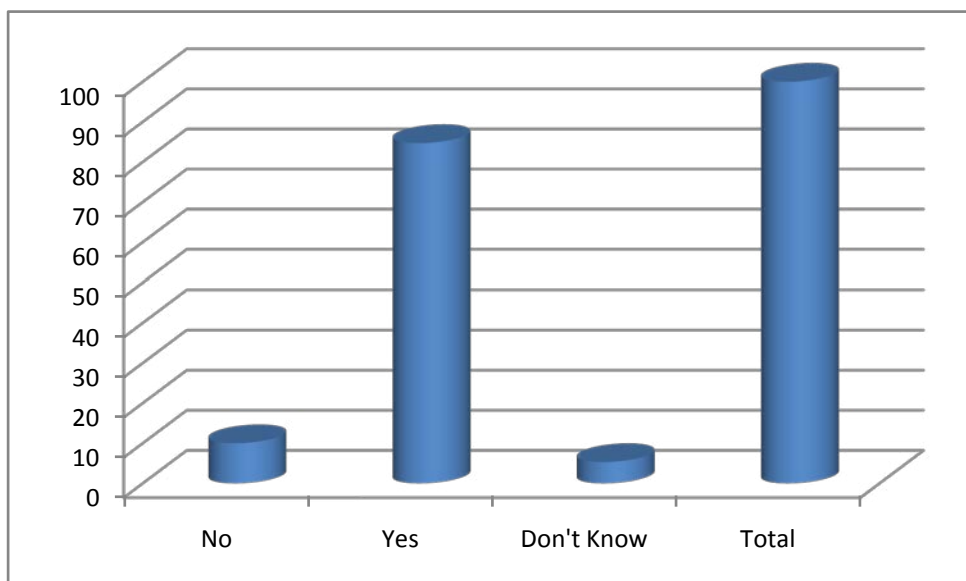


Figure 7 shows the Respondent’s opinion on Maternal Mortality where 10.0% of

respondents answered Voucher Scheme did not reduce Maternal Mortality, 84.7%

of respondents answered Voucher Scheme reduced Maternal Mortality and 5.3% of respondents did not know the Voucher

Scheme reduced or did not reduce Maternal Mortality.

**Figure 8: Respondent’s opinion on Maternal Health Care**

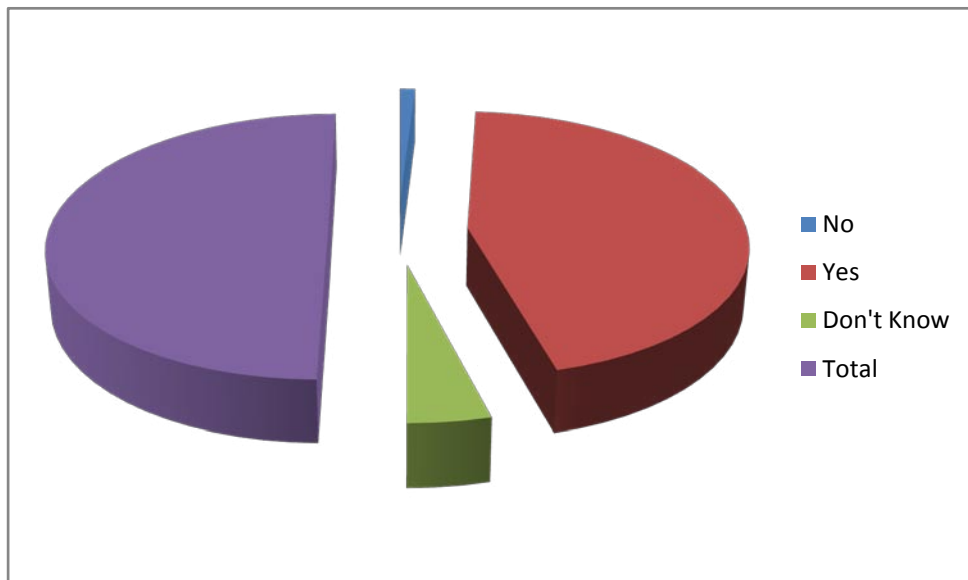


Figure 8 shows the Respondent’s opinion on Maternal Health Care where 2.0% of respondents answered Voucher Scheme did not increase Maternal Health Care, 89.3% of respondents answered Voucher

Scheme increased Maternal Health Care and 8.3% of respondents did not know the Voucher Scheme increased or did not increase Maternal Health Care facilities.



**Table 2: Characteristics Respondent's Husband**

Name of the Variables	Frequency	Percentage (%)
Husband's Education		
No Education	37	12.3
Primary	127	42.3
Secondary	92	30.7
Higher	44	14.7
Husband's Occupation		
Rickshaw puller	16	5.3
Small Business	56	18.7
Bus/Boat driver	23	7.7
Farmer	44	14.7
Fisherman	93	31.0
Day Labourer	60	20.0
Government/NGO Service	8	2.7
Husband's Income		
less than 5000	31	10.3
5000-10000	254	84.7
10000+	15	5.0
Husband's Age		
18-25	61	20.3
25+	239	79.7
<b>Total</b>	<b>300</b>	<b>100</b>

Table 2 shows the Characteristics Respondent's Husband of the respondents. In this study, 30.7% respondent's husbands were of secondary level, 42.3 % were of primary level, only 12.3 % respondent's husbands were no education but 14.7% of the respondents' husband had higher education. The majority husbands of the respondents of the study were primary level. In case of the husbands of the respondents majority (31.0%) were Fisherman, 18.7% were small business men. Rickshaw puller was 5.3%, bus or boat driver was 7.7%, 14.7% respondents'

husband were Farmer, 20.0% were day labourer but only 2.7% respondents' husbands were government or NGO service holders. According to the table majority of the respondents (84.7 %) were 5000-10,000 taka income group. Only 5.0% % respondents' husbands were of above 10,000 taka income group. Among the husbands of the respondents 10.3% were of less 5000 taka income group. Most of the respondents' husbands age above 25 years old (79.7%), 20.3% of the respondents' husbands were in 18-25 age group.





**Table 3: Asset and Other Wealth**

Name of the Variable	Frequency	Percentage (%)
Land		
Yes	267	89.0
No	33	11.0
Own House		
Yes	267	89.0
No	33	11.0
Domestic Animal		
Yes	65	21.7
No	235	78.3
Other Asset		
Yes	41	13.7
No	259	86.3
<b>Total</b>	<b>300</b>	<b>100</b>

In Table 3, there showed asset and wealth of the respondents. Majority percent of the respondents' had land and own house counted as 89.0 % but only 11.0% of the respondents who did not have their own house and land. 21.7% of the respondents

had domestic animals and 78.3 % of the respondents did not have domestic animals. But the respondents had other assets among 13.7% but had not 86.3 % of the respondents.

**Table 4: Mass Media Exposure**

Name of the Variable	Frequency	Percentage (%)
Watching TV		
Yes	42	14.0
No	258	86.0
Listening Radio		
Yes	110	36.7
No	190	63.3
Other		
Yes	225	75.0
No	75	25.0
<b>Total</b>	<b>300</b>	<b>100</b>

Table 4 shows the mass media exposure of the respondents where 86.0% majority watching Television but 14.0% not watching Television. 36.7% of the respondents were listening Radio and

63.3% of the respondents did not listen Radio; but 75.0% of the respondents were spent their time by other way but 25.0% of the respondents basically did not spend their time in mass media.



## 4.2 Bivariate Analysis

**Table 5: Antenatal Care Services and Voucher Scheme**

Name of the Variable	Voucher Scheme		Total N (%)	χ <sup>2</sup> and P-Value
	Yes (%)	No (%)		
No. of ANC Visit				
<3	9.4	72.1	300 (100)	X <sup>2</sup> = 71.950 P< .000
3-4+	90.6	27.9		
Danger Sign				
Yes	26.4	51.4	300 (100)	X <sup>2</sup> = 10.950 P< .001
No	73.6	48.6		
Physical Examination				
Yes	67.9	18.6	300 (100)	X <sup>2</sup> = 53.399 P< .000
No	32.1	81.4		
Vitamin Tablet/Syrup				
Yes	92.5	48.2	300 (100)	X <sup>2</sup> = 34.715 P< .000
No	7.5	51.8		
Iron Tablet				
Yes	88.7	36.8	300 (100)	X <sup>2</sup> = 47.204 P< .000
No	11.3	63.2		
TT Vaccination				
Yes	73.6	50.2	300 (100)	X <sup>2</sup> = 9.615 P< .001
No	26.4	49.8		
Healthy Food				
Yes	83.0	13.0	300 (100)	X <sup>2</sup> = 1.132 P< .000
No	17.0	87.0		
Other Services				
Yes	7.5	85.0	300 (100)	X <sup>2</sup> = 1.281 P< .000
No	92.5	15.0		

Table 5 shows the cross tabulation between Antenatal Care Services and Voucher Scheme. In the Table Voucher Scheme receivers and Non- Voucher Scheme Receivers' number of the antenatal care visit is very much distinct where 9.4% voucher scheme receivers took antenatal care visit below <3 and 3-4+ antenatal visit receivers 90.6% but on the other hand, Non-Voucher Scheme receivers took 72.1% antenatal care visit below <3 antenatal visits and 3-4+ antenatal visit received 27.9%, which is

significant in (p-value= P< .000). But danger sign antenatal care services received by Voucher Scheme receivers 26.4% but not received 73.6% and Non-Voucher Scheme receivers received danger sign 51.4% and not received 48.6% and also their p-value is 0.001. Physical examination service took by Voucher Scheme receivers 67.9% and did not receive 32.1% but among non-Voucher Scheme receivers took physical examination services by 18.6% but not received by 81.4%. Vitamin Tablet



voucher Scheme receivers received 92.5% and non-voucher Scheme receivers received 48.2%. Iron tablet voucher scheme receivers received by 88.7% but non-voucher scheme receivers did not receive 63.2%, which is significant at  $p < .000$ . TT Vaccination services received by Voucher Scheme receivers 73.6% but non voucher scheme receivers did not

receive by 49.8% of the total respondents and it is significant as  $p < .001$ . Voucher Scheme receivers received healthy food and other services respectively 83.0% and 7.5% but non-voucher scheme receivers did not receive healthy food and other services respectively 87.0% and 15.0%, which are significant as  $p\text{-value}(P < .000)$ .

**Table 6: Delivery Care Services and Voucher Scheme**

Name of the Variable	Voucher Scheme		Total N (%)	$\chi^2$ and P-Value
	Yes (%)	No (%)		
Skilled Birth attendance				
Yes	64.2	26.3	300(100)	$X^2 = 28.252$ $P < .000$
No	35.8	73.7		
Institutional Delivery Services				
Yes	86.8	24.7	300(100)	$X^2 = 73.330$ $P < .000$
No	13.2	75.3		
Transport Cost				
Yes	92.5	23.1	300(100)	$X^2 = 91.919$ $P < .000$
No	7.5	76.9		
Safe Home Delivery Services				
Yes	11.3	73.7	300(100)	$X^2 = 72.540$ $P < .000$
No	88.7	26.3		
Referral				
Yes	86.8	22.3	300(100)	$X^2 = 81.354$ $P < .000$
No	13.2	77.7		
Other				
Yes	13.2	89.1	300(100)	$X^2 = 1.364$ $P < .000$
No	86.8	10.9		

Table 6 shows the cross tabulation between Delivery Care Services and Voucher Scheme where Skilled Birth attendance received by Voucher Scheme receivers 64.2% and did not receive 35.8% but non-Voucher Scheme receivers did not receive by 73.7 and received by 26.3%, which is significant as  $p$  value ( $P < .000$ ). Institutional Delivery Services received by Voucher Scheme receivers 86.8% but non-Voucher Scheme receivers did not receive by 75.3%, which is significant as  $p$  value ( $P < .000$ ). Transport

Cost received by Voucher Scheme receivers 92.5% but non-Voucher Scheme receivers did not receive by 76.9%, which is significant as  $p$  value ( $P < .000$ ). Safe Home Delivery Services received by Voucher Scheme receivers 11.3% but non-Voucher Scheme receivers did not receive by 73.7%, which is significant as  $p$  value ( $P < .000$ ). On the other hand, Referral and Other services respectively received by Voucher Scheme receivers 86.8% and 13.2% but non-Voucher Scheme receivers did not receive by 77.7%



and 10.9%, which are significant as p value ( $P < .000$ ).

**Table 7: Postnatal Care Services and Voucher Scheme**

Name of the Variable	Voucher Scheme		Total N (%)	$\chi^2$ and P-Value
	Yes (%)	No (%)		
Birth Control				
Yes	28.3	74.1	300(100)	$\chi^2 = 40.768$
No	71.7	25.9		$P < .000$
Bleeding				
Yes	58.5	51.0	300(100)	$\chi^2 = .978$
No	41.5	49.0		$P < .323$
Fever				
Yes	81.1	45.3	300(100)	$\chi^2 = 22.380$
No	18.9	54.7		$P < .000$
Headache or Blurred Vision				
Yes	47.2	39.3	300(100)	$\chi^2 = 1.128$
No	52.8	60.7		$P < .288$
Swelling in Face				
Yes	15.1	89.5	300(100)	$\chi^2 = 1.336$
No	84.9	10.5		$P < .000$
Tiredness or Breathlessness				
Yes	39.6	32.4	300(100)	$\chi^2 = 1.203$
No	60.4	67.6		$P < .312$
Child Bearing Planning Service				
Yes	60.4	63.6	300(100)	$\chi^2 = .190$
No	39.6	36.0		$P < .663$
Long Time Birth Control				
Yes	71.7	19.4	300(100)	$\chi^2 = 58.291$
No	28.3	80.6		$P < .000$
Breastfeeding				
Yes	79.2	30.0	300(100)	$\chi^2 = 44.695$
No	20.8	70.0		$P < .000$
Other				
Yes	5.7	86.6	300(100)	$\chi^2 = 1.430$
No	94.3	13.4		$P < .000$

Table 7 shows the cross tabulation between Postnatal Care Services and Voucher Scheme where Birth Control received by Voucher Scheme receivers 28.3% and did not receive 71.7% but non-Voucher Scheme receivers received by 74.1% and did not receive by 25.9%, which is significant as p value ( $P < .000$ ). Bleeding Service received by Voucher

Scheme receivers 58.5% but non-Voucher Scheme receivers receive by 51.0%, which is not significant as p value ( $P < .323$ ). Fever Service received by Voucher Scheme receivers 81.1% but non-Voucher Scheme receivers received by 45.3%, which is significant as p value ( $P < .000$ ). Headache or Blurred Vision Services received by Voucher Scheme





receivers 47.2% but non-Voucher Scheme receivers did not receive by 60.7%, which is not significant as p value ( $P < .288$ ). Swelling in Face Services received by Voucher Scheme receivers 15.1% but non-Voucher Scheme receivers did not receive by 10.5%, which is significant as p value ( $P < .000$ ). Tiredness or Breathlessness Service received by Voucher Scheme receivers 39.6% but non-Voucher Scheme receivers did not receive by 67.6%, which is not significant as p value ( $P < .312$ ). Child Bearing Planning Service received by Voucher

Scheme receivers 60.4% but non-Voucher Scheme receivers did not receive by 36.0%, which is not significant as p value ( $P < .663$ ). On the other hand, Long Time Birth Control, Breastfeeding and Other services respectively received by Voucher Scheme receivers 71.7%, 79.2% and 5.7% but non-Voucher Scheme receivers did not receive by 80.6%, 70.0% and 13.4%, which are significant as p value ( $P < .000$ ) in every steps.

**Table 8: Wealth and Voucher Scheme Crosstabulation**

Name of the Variable	Voucher Scheme		Total N (%)	$\chi^2$ and P-Value
	No (%)	Yes (%)		
Wealth				
Poor	78.1	62.3	300(100)	$X^2 = 5.917$ $P < .015$
Rich	21.9	37.7		

Table 8 shows the cross tabulation between wealth and Voucher Scheme where Voucher Scheme receivers level examined by Chi-Square test; Chi-Square value is 5.917 and p-value is  $P < 0.015$ , which is significant among wealth and

Voucher Scheme. Voucher Scheme receivers are 62.3% who were poor and 37.7% were rich. On the other hand, Non-Voucher Scheme receivers were 78.1% of the total respondents who were poor and 21.9% were in high wealth counted level.

**Table 9: Media and Voucher Scheme Crosstabulation**

Name of the Variable	Voucher Scheme		Total N (%)	$\chi^2$ and P-Value
	No (%)	Yes (%)		
Media Score				
Low	6.1	11.3	300(100)	$X^2 = 1.846$ $P < .144$
High	93.9	88.7		

Table 9 shows the cross tabulation between Media Score and Voucher Scheme where Voucher Scheme receivers level examined by Chi-Square test; Chi-Square value is 1.846 and p-value is  $P < 0.144$ , which is not significant among Media and Voucher Scheme. Voucher

Scheme receivers are 11.3% who were in low Media Score and 88.7% were in high Media Score receivers. On the other hand, Non-Voucher Scheme receivers were 93.9% of the total respondents who were high Media Score level receivers and 6.1% were in low Media Score level.



**Table 10: ANC Score and Voucher Scheme Crosstabulation**

Name of the Variable	Voucher Scheme		Total N (%)	$\chi^2$ and P-Value
	No (%)	Yes (%)		
ANC Score				
Low	22.3	51.1	300(100)	$X^2 = 1.353$
High	77.7	84.9		$P < .164$

Table 10 shows the cross tabulation between antenatal care (ANC) score and Voucher Scheme where Voucher Scheme receivers level examined by Chi-Square test; Chi-Square value is 1.353 and p-value is  $P < 0.164$ , which is not significant among ANC Score and Voucher Scheme.

Voucher Scheme receivers are 51.1% who were low and 84.9% who are in high ANC score level. On the other hand, Non-Voucher Scheme receivers were 77.7 % of the total respondents who were in ANC score high and 22.3% who were low ANC score level counted.

**Table 11: Delivery Score and Voucher Scheme Crosstabulation**

Name of the Variable	Voucher Scheme		Total N (%)	$\chi^2$ and P-Value
	No (%)	Yes (%)		
Delivery Score				
Low	48.6	5.7	300(100)	$X^2 = 33.234$
High	51.4	94.3		$P < .000$

Table 11 shows the cross tabulation between Delivery Score and Voucher Scheme where Voucher Scheme receivers level examined by Chi-Square test; Chi-Square value is 33.234 and p-value is  $P < 0.000$ , which is significant among delivery Score level and Voucher Scheme. Voucher Scheme receivers are 5.7% who

were in Delivery low score and 94.3% Voucher Scheme receivers were in delivery high score. On the other hand, Non-Voucher Scheme receivers were 48.6% of the total respondents who were in low delivery score level and 51.4% who were in high delivery Score level.

**Table 12: PNC Score and Voucher Scheme Crosstabulation**

Name of the Variable	Voucher Scheme		Total N (%)	$\chi^2$ and P-Value
	No (%)	Yes (%)		
PNC Score				
Low	21.9	11.3	300(100)	$X^2 = 3.031$
High	78.1	88.7		$P < .082$

Table 12 shows the cross tabulation between Postnatal care (PNC) and Voucher Scheme where Voucher Scheme receivers level examined by Chi-Square

test; Chi-Square value is 3.031 and p-value is  $P < 0.082$ , which is not significant among PNC Score and Voucher Scheme. Voucher



Scheme receivers are 88.7% who were in high PNC Score but 11.3% Voucher Scheme receivers who were in PNC score level low. On the other hand, NonVoucher Scheme receivers were 21.9% of the total

respondents who were low in PNC Score and Non-Voucher Scheme receivers 78.1% who were in high score of PNC Score level.

### 4.3 Multivariate and Logistic Regression Analysis

Table 13 presents odd ratio estimates of the effects of voucher scheme on ANC. The table includes control variables of respondents' age, education, wealth and religion. Model 1 includes control variables of age and education and the main independent variable voucher scheme. The model suggests that voucher

scheme receivers take higher level of ANC care as compared to those who do not receive voucher scheme. When two other variables of wealth and religion are included in the analysis I find that voucher scheme receivers have 30 times higher rate of taking ANC care.

**Table 13: Odd Ratios (OR) of ANC and Voucher Scheme**

Variable	Model 1 (OR and SE)	Model 2 (OR and SE)
Voucher Receiver		
Yes	31.223*** (.507)	30.314*** (.515)
No (R)		
Respondent's Age	1.074* (.031)	1.074* (.031)
Respondent's Education	1.156*** (.191)	1.163*** (.191)
Wealth		
Rich		.939** (.327)
Poor (R)		
Religion		
Islam		.756 (.625)
Other (R)		
Constant	.056*** (.874)	.076*** (1.091)
-2 Log	320.339	310.101
<b>Total (N)</b>	<b>300</b>	<b>300</b>

\*p<0.10

\*\*p<0.05

\*\*\*p<0.01



**Table 14: Odd Ratios (OR) of SBA and Facility Use in Delivery Care**

Variable	Skilled Birth attendance (SBA) (OR and SE)	Facility Use (Institutional Delivery) (OR and SE)
Voucher Receiver Yes No (R)	6.019*** (.349)	8.300*** (0.749)
Respondent's Age	1.059* (.031)	1.142** (.035)
Respondent's Education	1.289*** (.177)	0.829*** (.228)
Wealth Rich Poor (R)	0.749 (.313)	1.286*** (.358)
Religion Islam Other(R)	1.730*** (.521)	2.961*** (.630)
Constant	0.037*** (1.033)	0.005** (1.193)
-2 Log	347.256	255.086
<b>Total (N)</b>	<b>300</b>	<b>300</b>

\*p<0.10      \*\*p<0.05      \*\*\*p<0.01

Table 14 presents odd ratios of skilled birth attendant and facility use. Concerning skill birth attendant I found that voucher scheme receivers had about six times higher odds of getting skilled birth attendant during delivers as compared to those who were not voucher scheme receivers after adjusting for age,

education, wealth and religion. It is interesting to note that respondents' higher education is associated with higher odds of receiving skilled birth attendant (1.3 times). On the other hand, voucher scheme receivers also have 8.3 times higher odds of going to facility for deliver even after controlling for respondents' age, education, wealth and religion.





**Table 15: Odd Ratios (OR) of PNC and Voucher Scheme**

Variable	Model 1	Model 2
Voucher Receiver Yes No (R)	1.800*** (0.980)	1.500*** (0.053)
Respondent's Age	1.033* (.155)	1.037* (.146)
Respondent's Education	1.282*** (.984)	1.281*** (.977)
Wealth Rich Poor (R)		1.200*** (0.856)
Religion Islam Other(R)		1.100** (0.737)
Constant	.003*** (4.421)	0.139*** (0.738)
-2 Log	23.159	21.940
<b>Total (N)</b>	<b>300</b>	<b>300</b>

\*p&lt;0.10

\*\*p&lt;0.05

\*\*\*p&lt;0.01

Table 15 shows the effect of odd ratios on the postnatal care. Model 1 includes control variables of age education, wealth and religion. This model suggests that respondents have 1.8 times higher odds of getting postnatal care after controlling for

age, education, wealth and religion. Finally, Model 2 shows that voucher scheme receivers get 1.5 times higher postnatal care then non-receivers after controlling for the selected characteristics of the respondent.

## 5. Discussion

The study deals with 300 sample size. Out of 300 respondents, 82.3% are Non-Voucher Scheme receivers and the rest 17.7% are Voucher Scheme receivers. The respondents were involved in this study are very poor but they are now married, pregnant and have any children. After the preparation of a well-structured questionnaire, all the data were collected.

In this study, it has found that there is significance difference in Voucher Scheme receivers and Non-Voucher Scheme receivers in getting services of their antenatal, delivery and pregnancy time. Voucher Scheme receivers were received effective services in their maternal time but Non-Voucher Scheme receivers' health and nutrition quietly lower.

Voucher Scheme's effect on antenatal care examined Voucher Scheme receivers is



84.9% who were in high ANC Score and 15.1 % were only low ANC Score level; but Non-Voucher Scheme receivers were 77.7% of the respondents who were in ANC Score high and receivers 22.3 % who were counted low ANC Score level. In this work, it has found that the total number of antenatal care visit of the respondents is lower of Voucher Scheme receivers than Non- Voucher Scheme receivers because of Voucher Scheme providers meeting with giving advice, counseling and services among Voucher Scheme receivers frequently in their ANC, deliver and PNC time. Provided counseling among Voucher Scheme receivers by Voucher Scheme providers is 82.0% and did not provide 18.0% of the 53 Voucher Scheme receivers.

Effect of Voucher Scheme on Delivery care examined by Chi-Square test; Chi-Square value is 33.234 and p-value is  $P < 0.000$ , which is significant among delivery services and Voucher Scheme. Voucher Scheme receivers are 5.7% who were in Delivery low score and 94.3% Voucher Scheme receivers were in delivery high score. On the other hand, Non-Voucher Scheme receivers were 48.6% of the total respondents who were in low delivery score level and Non-Voucher Scheme receivers 51.4% who were not received Voucher Scheme but then their delivery Score is higher. It was found that overall services and health status Voucher Scheme receivers are comparatively better than Non-Voucher Scheme receivers.

Postnatal care (PNC) has effected by Voucher Scheme found that Voucher Scheme receivers are comparatively belong good health in their maternal time than Non-Voucher Scheme receivers were 21.9% % of the total respondents who were low in PNC. In the study, it has found that Voucher Scheme receivers are

counseled advised and treated much than non Voucher Scheme receivers so that their postnatal care and services received amount is higher. Among Voucher Scheme receivers PNC Score is 88.7% higher and 11.3% only lower.

Maternal voucher Scheme played a major role in the Bhola districts on controlling or increasing intervention on maternal and child health. The overall health facilities provided by Voucher Scheme providers acclaimed in increasing maternal health care services. Respondent's education, income and occupation had impacted the health status but Maternal Voucher Scheme removed many barriers of the poor women's maternal times' services they needed or need. . Total received Voucher Scheme 53 out of 300 respondents where 16.7%% of the respondents are provided Voucher Scheme by Government but only 3 (1.0%) of the respondents are provided Voucher Scheme by Private or Non-government organization so that if the number of non-government organizations involvement can increase in providing maternal health Voucher Scheme, it will give a good outcome because as Respondent's opinion on Infant mortality where 18.7% of respondents answered Voucher Scheme did not reduce infant mortality, 77.0% of respondents answered Voucher Scheme reduced infant mortality and 4.3% of respondents did not know the Voucher Scheme reduced or did not reduce infant mortality. And also as Respondent's opinion on Maternal Health Care where 2.0% of respondents answered Voucher Scheme did not increase Maternal Health Care, 89.3% of respondents answered Voucher Scheme increased Maternal Health Care and 8.3% of respondents did not know the Voucher Scheme increased or did not increase Maternal Health Care facilities.



By this study, Maternal Health Care where 2.0% of respondents answered Voucher Scheme did not increase Maternal Health Care, 89.3% of respondents answered Voucher Scheme increased Maternal Health Care and 8.3% of respondents did not know the Voucher Scheme increased or did not increase Maternal Health Care facilities. So, it can be assumed that Maternal Health Care services provided by the mechanisms of Voucher Scheme, which can increase the maternal and infant health care with overall well-being of health status of Bangladesh.

## 6. Conclusion

The overall findings of this study is that Voucher Scheme receivers were more facilitated in their maternal time, which means antenatal, deliver and postnatal care than Non-Voucher Scheme receivers. Voucher Scheme receivers are advised, counseled and facilitated services to reduce malnutrition or healthcare barriers. Bangladesh provided stronger evidence of voucher programs being able to target the poor and the study assessed the impact of demand-side financing strategy on increasing the use of maternal health

services among low-income women. In differently, it can be said that Voucher Scheme played a major role in the Bhola districts on controlling or increasing intervention on maternal and child health. The overall health facilities provided by Voucher Scheme providers acclaimed in increasing maternal health care services. Respondent's education, income and occupation had impacted the health status but Maternal Voucher Scheme removed many barriers of the poor women's maternal care services they needed or need.

In spite of the need to increase skilled birth attendance and antenatal visit among poor women, then there are many barriers of our society and country to get all kinds of services a woman got in their maternal time as maternal health care. But Voucher Scheme's effectiveness services removed those kinds of complexities faced any poor women so that The Voucher Scheme's implementation was associated with reduced inequity in institutional delivery. Moreover, poor women were substantially more likely to take advantage of the Voucher Scheme than non-poor women to get maternal health care facilities.

### 6.1 Further Scopes of the Study

This study explores the relevant information on maternal health care at Bhola district in Bangladesh with comparing both Voucher Scheme receivers and Non-Voucher Scheme receivers' health status. The study findings provide valuable aspects of understanding to apprehend the actual scenario of maternal health and child health. Hence, the information found in the study could be a source of large scale researches. This study gives a broad and general overview about the maternal health, health care practices

and factors associating with demand side financing maternal voucher scheme and therefore, ample opportunities are there for the further studies on other health issues in Bhloa district in the light of my findings.

Despite the fact that the present study was done in a very small scale due to limitations such as resources, time etc. but the study findings will certainly support as a base line study for further and extended research in this regard.



## 7. Recommendations

1. To eliminate corruption and political influence from health sector by introducing Comprehensive plans which are Linkage or referral system among various levels of health sector and Coordination among GOs and NGOs to achieve desired targets by adopting a policy to make health sector workers work in various levels in Bangladesh for utilizing maternal health voucher scheme .
2. To ensure better quality services of maternal health voucher scheme, need to create skilled workers and motivation of the sector.
3. To create more career opportunities in health sector and increase more skilled doctors and community health workers, nurses, etc. by increasing motivation and incentives for health workers ensuring better services as well.
4. To reduce maternal mortality and infant mortality in Bangladesh, Need to increase allocation for health sector in national budget and Proper utilization of both local and foreign resources with highlighting infrastructure development in forms of institutions, clinics, hospitals, research centers, etc. in health sector.
5. Many services must need to add under Voucher Scheme services, which will help to get timely health care services ; especially poor women in their antenatal, delivery and postnatal time.

## 7.1 Limitations of this Study

- Time constraint was a limitation of this study. More data could be collected and an in-depth analysis could be made if more time was available for this study.
- Data was collected only getting information about Voucher Scheme Receivers or Non- Voucher Scheme Receivers from Union Parishad and Upazzila Health Center. Many Times, we, interviewers, did not get the selected woman for interview at their home place.
- Because of the prevailing tense political environment entire data could not be collected although sample size was 350 but 300 collected only.
- Since the matter was extremely many secret the data collectors faced some problems while collecting data. In some cases the respondent intentionally might have hidden information. This might have affected the outcome of the study leading to some bias in the result.
- The interviewers sometimes left the interview in the middle of their interview because of the respondent's personal problem so that it was very hard to get more information about the study.
- The interviewers attitude was so much opposite to give interview because of their low education level and don't have any interest to talk or discuss anything about the research.



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