



Daffodil
International
University

Project Report

“Effect on Ante natal care during pregnancy”

At

**Mohammadpur Fertility Services & Training Centre, 100
Bedded Mother & Child Health Hospital**

Supervised by

**Ms. Tasmia Tasnim
Lecturer (Senior Scale)**

Department of Nutrition & Food Engineering
Faculty of Allied Health Science

Submitted by

**Ismath Jahan
ID: 171-34-601**

Department of Nutrition & Food Engineering
Daffodil International University

This Project report has been submitted in fulfillment of the requirements for the Degree of Bachelor of Science in Nutrition & Food Engineering.

Fall-2020

THE LETTER OF TRANSMITTAL

Date: 19-04-2021

Dr. Sheikh Mahatabuddin
Head & Associate Professor
Department of Nutrition and Food Engineering
Faculty of Allied Health Science, Daffodil International University.

Subject: Thesis report submission.

Dear sir,

Thank you so much for your support in creating this report. I would have had a hard time making this report without your help.

I have tried to make this report relevant and reasonable by analyzing the information I have collected. I made it my best effort to fulfill the purpose of the report. I think the knowledge gained while preparing the report will be useful in my future life and in my professional life. In spite of my best efforts, if there is any mistake in this report, I request you to look at it with forgiveness.

I certainly appreciate it if you cooperate with me use your opinion about this report. Also, if you have any questions about this report, I would be happy to answer. Many thanks again for your support and for yourself.

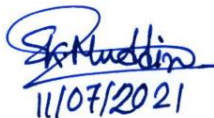
Yours Sincerely,

Ismath Jahan
ID: 171-34-601
Department of Nutrition and Food Engineering
Daffodil international university

THE DECLARATION

I hereby declare that I even have taken this “Thesis Report” under the supervision of **Ms. Tasmia Tasnim, Lecturer (Senior Scale), Department of Nutrition & Food Engineering, Faculty of Allied Health Science, Daffodil International University**. I also declare that I even have submitted neither this project to satisfy my other course related nor it'll be submitted to the other person within the future.

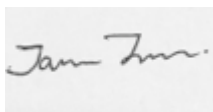
Certified by:



11/07/2021

Dr. Sheikh Mahatabuddin
Associate Professor & Head
Department of Nutrition and Food Engineering (NFE)
Faculty of Allied Health Sciences (FAHS)
Daffodil International University

Certified by:



Ms. Tasmia Tasnim
Lecturer (Senior Scale)
Department of Nutrition & Food Engineering
Faculty of Allied Health Science
Daffodil International University

ACKNOWLEDGEMENTS

First of all, I would like to thank my Creator, Allah Subhanahu wa Ta'ala, for enabling me to complete this task successfully.

I would like to thank you from the bottom of my heart, **Professor Dr. Ahmad Ismail Mustafa** for accepting this degree in Faculty of Allied Health Science.

I sincerely thank to my academic supervisor **Ms. Tasmia Tasnim Lecturer (Senior Scale)**, DIU for guiding me and for giving me the chance to initiate this report.

Also, I am very grateful to my internship supervisor **UHM Shahnaz Farid Titthi** Nutritionist of MFSTC Hospital for helping me together with her valuable suggestions regarding internship.

MY DEDICATION

I dedicate this report back to my beloved parents and every one of my respected teachers who support me to successfully completing my graduation. Specially my supervisor **Ms. Tasmia Tasnim, Lecturer (Senior Scale)**, Department of Nutrition & Food Engineering, Faculty of Allied Health Science, Daffodil International University.

THE TABLE TO CONTENT

COVER	i
LETTER OF TRANSMITTAL	i
DECLARATION	iii
ACKNOWLEDGEMENT	iv
DEDICATION.....	v
TABLE OF CONTENT.....	vi
LIST OF TABLES.....	vii
ABSTRACT.	viii
CHAPTER: 01	01
1.1 INTRODUCTION	01
1.2 Aim	03
1.3 OBJECTIVE OF THE PROGRAM	04
1.4 ANC SERVICES AVAILABLE IN DHAKA CITY.....	04
CHAPTER: 02 FINDINGS FROM RESEARCH AND OTHER EVIDENCE	05
2.1 EFFECTIVE SITES OF TAKING ANTENATAL CARE.....	05
2.2 ANTENATAL CARE ACTIVITIES FOUND TO BE EFFECTIVE.....	06
2.3 FACTORS ASSOCIATED WITH FAILURE TO RECEIVE ANTENATAL CARE.....	07
2.4 THE GOALS OF ANTENATAL CARE.....	08
2.5 WHY ANC IS IMPORTANT.....	08
2.6 HEALTH OBSERVING IN THE PREGNANCY.....	09
2.7 NEONATAL HEALTH CARE.....	12
2.8 PREMATURE BIRTH.....	13
CHAPTER: 03	14
3.1 THE METHODS AND MATERIALS.....	14
CHAPTER: 04.....	16
4.1 THE TECHNIQUE AND PROCESS OF DATA COLLECTION.....	16
4.2 DATA ANALYSIS.....	17
CHAPTER: 05	18
5.1 RESULTS	18
5.2 THE MATERNAL AND NEONATAL COMPLICATIONS INCIDENCE	20
CHAPTER: 06	23
6.1 DISCUSSION	23
CHAPTER: 07.....	25
7.1 CONCLUSION.....	25
7.2 REFERENCE.....	26

LIST OF TABLES

Table 5.1: Religion of participants	16
Table 5.2: Educational qualification of participants.....	16
Table 5.3: Received TT injection of participants	17
Table 5.4: Place of residence to the participants	17
Table 5.5: Husband’s occupation of participants	17
Table 5.6: Number of ANC visit of participants	17
Table 5.7: Effect of ANTENATAL CARE counsel on antepartum problems of participants	18
Table 5.8: Effect of ANTENATAL CARE on neonatal health outcomes of participants.....	19
Table 5.9: Relationship of ANC visit with Birth weight of infants.....	20

LIST OF ABBREVIATIONS

- MFSTC: Mohammadpur Fertility Services & Training Centre
- WHO: World Health Organization
- USA: United States of America

ABSTRACT

The World Health Organization says a mother should see a doctor at least four times during pregnancy to get an antenatal checkup. Now there are community clinics, there are hospitals - go to these places. The first came once in 18 weeks, then came in 28 weeks, then came in 32 weeks, then came once at the very end. This path is very easy for a mother to see a doctor at least four times. If she has any problems during pregnancy, they can be solved.

This study was focused on the scenario of the result who receive the four ANC visit and what is the pregnancy outcome of completing ANC service. A cross-sectional analytical study was performed where 120 pregnant mothers were participated. A pre-designed questionnaire was used to collect the data about education, family condition of the participants. The study revealed that **27.73%** of mother took 4 or more than 4 ANC visit and **73.10%** mother are not very aware of ANC visit. They do not maintain a good diet plan and they also have less knowledge about Pregnant mother complication. There **26%** were illiterate, they didn't go to school for education.

CHAPTER NUMBER 01

1.1 THE INTRODUCTION

Routine antenatal care (ANC) is defined as the care provided by health practitioners (or others) to all pregnant women to ensure the best health conditions for the women and their fetuses during pregnancy. The basic components of the ANC include risk identification, prevention and management of pregnancy-specific or concomitant diseases, education and health promotion. The goal-oriented approach with reduced number of visits, currently recommended by the World Health Organization (WHO), was incorporated into WHO's Integrated Management of Pregnancy and Childbirth guidelines. However, even though the number and content of antenatal visits have been appraised and summarized in systematic reviews during recent years, an evaluation of the evidence is needed because recommendations may have changed over time in light of new and compelling evidence.

Antenatal care (ANC) coverage may be a success story, found over two-thirds of the pregnant women have a minimum of one ANC contact. However, to realize the complete life-saving potential that ANC promises for ladies and babies, four visits providing essential evidence-based interventions – a package often called focused antenatal care – are required. Essential interventions in ANC include identification and management of obstetric [1]

Antenatal care includes planning for pregnancy and continues into the early neonatal and postpartem period. Health services generally consider that it begins with a pregnant woman's first visit to receive antenatal care and continues until birth. The model of antenatal care in western Europe, North America and many other countries includes 12-16 visits to health care services by the pregnant woman, as well as provider visits to her home. The first visit ordinarily focuses on taking a detailed social, family, medical and obstetric history, carrying out a complete physical examination, and making a risk assessment, which requires a broad range of laboratory tests. Subsequent visits include simpler examinations, though some examinations are still conducted at every visit. Later in pregnancy, examinations focus on the status of the developing fetus and the preparation for a safe delivery.

When ANC needed?

Once the pregnancy is confirmed, every three months, called trimester, various tests or examinations are required to ensure the well-being of the mother and the fetus. You can discuss the relevance of these tests with your gynecologist so that you do not become anxious. We will help you to be prepared so that you can know what tests you need to do when you go to the doctor. It will discuss your medical and family history, confirm pregnancy, an internal exam, and inform you of the estimated date or due date of your child's birth. Your ears, nose, throat, teeth, thyroid, lymph nodes, heart, lungs, abdomen, back and skin will be examined. You will be informed that the normal pregnancy is 280 days, or 40 weeks, calculated from the first day of the last menstrual period [2]

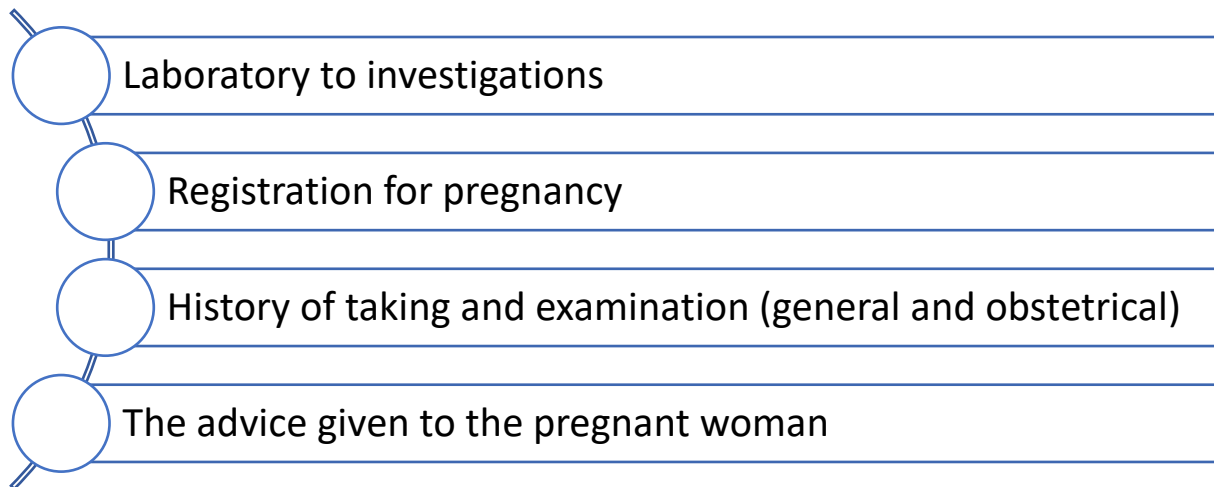
SCHEDULE OF THE ANTE NATAL CHECK-UPS

A recent multi-country randomized control trial led by the WHO and a scientific review¹³ showed that essential interventions are often provided over four visits at specified intervals, a minimum of for healthy women with no underlying medical problems. The results of this review have prompted WHO to define a replacement model of ANC supported four goal-oriented visits.

- Timing of the first visit/registration - the first visit or registration of a pregnant girl for ANC ought to happen as before long as a result of the physiological state is suspected.
- Second visit - Between fourteen and twenty-six weeks.
- Third visit - Between twenty-eight and thirty-four weeks.
- Fourth visit - Between thirty-six weeks and term [3]

The first meeting is very important. When a mother comes to us, we don't see her physical condition at the beginning. Is she fit? Will she be able to continue on this path? Let's see that first. I look at her weight, I look at her blood pressure, I look at her anemia, I look at her ailments.

THE COMPRISES OF ANC



1.2 THE AIM

The aim is to see how many poor pregnant mothers complete the full ANC visit, living in urban area like Dhaka. By doing the project it has been seen the scenario of the result who complete the four ANC visit and what is the pregnancy outcome. Those who didn't complete the 4 visits, had faced many complications during delivery time. And also-

- To optimize maternal and fetal health.
- To supply women maternal and fetal screening.
- To form medical or social interventions available to women where indicated.
- To enhance women's experience of pregnancy and birth and to organize women for motherhood whatever their risk status.

1.4 ANC SERVICES AVAILABLE IN DHAKA CITY

There are many hospitals where pregnant mothers are provided with different types of services which were not available before. Mothers are now getting these facilities very easily. There are various hospitals where pregnant mothers are benefited by the doctor's advice. One of them is Maternal and Child Hospital. There are many more hospitals for pregnant mothers. ANC service is provided to pregnant mothers in different government hospitals too.

Here some hospital name where any pregnant mother can get ANC services. They are-

- ❖ Mohammadpur Fertility Services & Training Centre, 100 Bedded Mother & Child Health Hospital
- ❖ Bangabandhu Sheikh Mujib Medical University Hospital
- ❖ BIRDEM General Hospital 2 (Child and Mother)
- ❖ Dhaka Medical College
- ❖ Shaheed Suhrawardy Medical College and Hospital
- ❖ Sir Salimullah Medical College.

1.3 THE OBJECTIVES

- Discover, assortment of subject.
- Selection of ANC of pregnant data of the trimester of pregnancy period and neonatal health screening.
- Searching of the most common factors.
- Ensure a traditional delivery of a healthfully baby and mother.
- Follow up ANC outcomes.

CHAPTER NUMBER 02

FINDINGS FROM RESEARCH AND OTHER EVIDENCE

2.1 EFFECTIVE SITES OF TAKING ANTENATAL CARE

Women who received antenatal care during their time of pregnancy are likely to have 18% lower odds of experiencing early neonatal mortality compared to groups who did not receive antenatal care during pregnancy. In terms of social well-being, the woman who comes from the richest family are likely to have 45% lower odds of experiencing early neonatal mortality compared to the poorest one. [4]

Observational studies have clearly demonstrated that antenatal care prevents health problems for both mother and child. Yet until fairly recently, little was known about which elements of antenatal care were particularly valuable. Research shows that many antenatal interventions are unnecessary or of unproven benefit. Nevertheless, components of antenatal care and timing still be introduced without scientific evaluation.

In general terms, antenatal care is relatively expensive. In a multi-country randomized trial administered by the planet Health Organization (WHO), the typical cost was about US \$3000 per pregnant woman in 1996. The main cost of antenatal care was found to flow from to the interventions that follow from the suspected problems found during the method of care. Therefore, antenatal care needs to be scrutinized and planned carefully. WHO has developed and evaluated a simplified model of care and has demonstrated during a large study that it provides the advantages of more complicated models while tending to save money [5].

Policy considerations

1. Antenatal care is one among the foremost important services in health care. Every pregnant woman should have full access thereto.
2. Excessive, unneeded and unproven interventions are often provided to women with normal pregnancies. A simplified model of care, as developed by WHO, based on evidence of benefit, seems quite appropriate.
3. Many antenatal interventions haven't been evaluated, and there's an excellent need for more research.[6]

2.2 ANTENATAL CARE ACTIVITIES FOUND TO BE EFFECTIVE

The basic activities of antenatal care fall within three general areas:

1. screening for health and socioeconomic conditions likely to extend the likelihood of specific adverse outcomes;
2. providing therapeutic interventions known to be beneficial; and
3. educating pregnant women about planning for safe birth, emergencies during pregnancy and the way to affect them.[7]

Several recent reviews affect patterns of routine antenatal look after low-risk pregnancy. A review of obtainable literature indicates that the scope and intensity of antenatal care are often reduced for ladies at low risk with none adverse health consequences. It should be noted, however, that “low risk” isn't alright defined, which the diagnosis of “high risk” isn't very precise and results in much unnecessary intervention in pregnancy.[8]

2.3 FACTORS RELATED TO FAILURE TO RECEIVE ANTENATAL CARE

The benefits of performing ANC are extensively discussed within the scientific literature. The deprivation of ANC are often a contributing factor for development of preterm labor, intrauterine growth retardation, low birth weight, maternal and neonatal mortality rate as a results of infections within the perinatal and postnatal periods. Thus, this study aimed to spot the factors causing lack of attendance at antenatal clinics in primiparas and to work out the consequences of lack of ANC on perinatal outcomes.[10]

Maternal complications and poor perinatal outcome are highly related to non-utilization of antenatal and delivery care services. This results in poorer outcomes in unbooked than booked patients. ANC services help pregnant women by identifying complications related to the pregnancy or diseases which may adversely affect the pregnancy. Through antenatal visits, women enjoy various interventions, including counseling about healthy lifestyles, the supply of iron/folic acid supplements, and tetanus toxoid vaccinations.[11]

The primary outcome of the study was the difference within the rate of maternal complications during pregnancy including DM , hypertensive disorders, anemia and antepartum hemorrhage between both groups. The secondary outcomes were the difference within the mode of delivery, fetal birth weight, rate of neonatal complications, and wish for referral to the pediatric care unit (PCU).[12]

2.4 THE GOALS OF ANTENATAL CARE

- The purpose of care during pregnancy is to ensure the birth of a healthy baby at the right time. The focus of prenatal care is not only to promote maternal health, but also to prevent various complications during childbirth. It also aims to prevent low birth weight, fetal disease, neonatal shortness of breath, and congenital anomalies.
- From the birth of the baby to the next 28 days, the newborn is in the care stage. This care is very important because if this care is taken properly, the death rate after delivery can be reduced. A special team of midwives, pediatricians and nurses takes care of the newborns. The first week after birth and especially the first forty-eight hours of monitoring and care is very important. This is because any negligence during this time can lead to serious health problems and increase the infant mortality rate. Proper care during this time can reduce infant mortality by 50 to 60 percent. Proper care in the first week of their lives can halve the infant mortality rate by more than half [13]

2.5 WHY THE ANC IS IMPORTANT?

This is a very important matter. Not only in our country, many developed countries are also facing this problem. In some cases, the maternal mortality rate cannot be prevented. In some cases, of course. That being said, there are three things at its core. Three late. One, we are late in making a decision. Two, I have decided but it is too late to reach the right place. Three, going there again may be too late to get the service. These three big delays hinder us [14].

While many expectant mothers are taking precautionary measures such as maintaining physical distance at home and outside, the fear of going to the doctor for a checkup is working among them at that moment. "You see a lot of adaptations happening in the world right now, where midwives or midwives are providing medical services over the phone or making specific appointments to summarize appointments to review the baby's condition and growth. I hope that health workers and themselves will be infected," Cady said. To protect them from pregnancy, pregnant women should see their health workers less often. They will see them directly if absolutely necessary. " However, considering the low and high risk of pregnant mothers, this system can be changed.[15]

It is also important to continue receiving professional support and guidance, including regular immunizations after childbirth. Talk to a healthcare provider about the safest way for you and your baby to get help with these things

2.6 HEALTH OBSERVING IN THE PREGNANCY

Breast care: Pregnant mothers need to be extra clean and have their breasts examined every day while taking a bath. Breast massage should be done to see if there is any tumor. The mother should be mentally prepared to breastfeed the baby.

Dental care: Mothers should brush their teeth after meals every day during pregnancy. Hormone secretion changes dramatically during pregnancy. Symptoms such as bleeding from the gums, swelling, gum pain, and toothache are very common. In addition, if someone has gum inflammation before pregnancy and is not treated, then it starts to get worse from the 2nd month of pregnancy

Food: Pregnant mothers need a balanced diet, it is possible to ensure the necessary nutrition and eliminate food deficiencies. Adequate amount of fish, meat, eggs and milk are required at this time. Also eat plenty of seasonal fruits and vegetables. It is possible to avoid the risk of formalin by soaking the purchased vegetables and fruits in water for half an hour after bringing them

from the market. At this time, you need to drink plenty of pure water. It is better not to eat extra oily food.

Taking special care of the body and taking preventive measures: At this time, you should take a good bath with soap every day and keep your fingernails and toenails short. Mother's teeth become very soft during pregnancy, so special care should be taken for teeth and gums. Tetanus vaccine must be given within four to eight months. At this time the body's resistance to disease is less than normal. Therefore, patients infected with influenza, measles, chicken pox, etc. should be kept away.

Dressing: Pregnant mothers must wear clean, comfortable, easy-to-wear and loose clothing. Wear the right size and soft shoes. Heels should be avoided in this case.

Travel: It is better not to go on long journeys during the first three months of pregnancy and the last three months. Traveling on high and low roads or in vehicles that are prone to tremors is harmful to health. Traveling in a healthy and pleasant environment for some time in the morning and afternoon is good for pregnant mothers, it keeps the body healthy and the mind cheerful. So, flower gardens, lake shores, parks - all these places should be visited.

Sleep: At this time you need at least two hours of sleep or rest during the day and at least eight hours of sleep at night. It is better to lie on your left side while sleeping or resting [16].

The essential parts of a centered approach to prenatal care

- Identification and police investigation of the pregnant girl and her expected kid.
- Recognition and management of pregnancy-related complications, significantly pre-eclampsia.
- Recognition and treatment of underlying or coincident ill health.
- Screening for conditions and diseases and/or symptoms of stress or force.
- Preventive measures, as well as tetanus antigen protection, de-worming, iron and B vitamin, intermittent preventive treatment of protozoal

infection in physiological condition (IPTp), insect powder treated bed nets (ITN).

- Support to pregnant mother for the development of her health:
 - We need to increase growth of maternal health wants and self-care throughout physiological condition and also the postnatal amount, as well as the necessity for social support throughout and once physiological condition.
 - Help the pregnant girl and her partner prepare showing emotional care to their baby. Significantly consider the role of a legitimate assistant for primary and exclusive breastfeeding and the care of the newborn necessary and at birth.[17]

2.7 THE NEONATAL HEALTH CARE

A baby from birth to 28 days is called a newborn. At this time, it is important for both mother and child. There is no substitute for cleanliness to keep the newborn safe. Her delicate soft body is very easy.

Extensive publicity is needed about the causes and ways to prevent birth defects in children. There is no alternative to make people at all levels of society aware and alert about this. The more people know about this, the less likely it is to occur. Public representatives, teachers, doctors, journalists and other concerned organizations should play an important role in the campaign.

Breast feeding: After the birth of the baby, the first and only job is to feed the mother's milk. Milk serves as the first vaccine for the baby. And protects the child from various diseases. Although the amount of milk is less, it provides adequate and complete nutrition for the baby. The baby is less likely to get night blindness, jaundice and other diseases by feeding milk. Both mother and baby are healthy when they are fed milk. Breastfeeding only means breastfeeding the baby for a full six months.

Kangaroo mother: There is a Kangaroo Mother Care Department for low birth weight babies where babies have to keep a skin-to-skin contact with the baby's mother or someone in her family.

High dependency: it is mainly to less serious illness of babies.[18]

2.8 THE PREMATURE BIRTH

A premature baby, often called a premium, has to overcome various obstacles to become completely healthy. As a mother or her caregiver, you need to be extra careful and also ensure the best nutrition for your baby. If a baby is born before 37 weeks of gestation, it is called a premature baby.

This Premium in others way:

Term: If a baby is born before 37 weeks of gestation.

Extreme preterm: If a baby is born 28 weeks before the normal pregnancy.

Very preterm: If a baby is born within 32 weeks of conception, what is called very preterm.

Preterm: If a baby is born within 37 weeks of conception, what is called preterm.

Moderate to late preterm: If a baby is born between 32 and 37 weeks of gestation, he or she should be referred to a Moderate to late preterm [19].

CHAPTER NUMBER 03

3.1 THE METHODS AND MATERIALS

The study areas

This hospital based prospective study was conducted in the Obstetric unit of Mohammadpur Fertility Services & Training Centre, 100 Bedded Mother & Child Health Hospital. They supply the best service to all or any clients to fulfill their needs and demand and every one desirable thing. To achieve a higher quality of outcome of pregnancy, newborn baby's treatment, kangaroo mother care, nutritional counseling, nursing and neonatal care.

Source of population

Pregnant mothers admitted into Mohammadpur Fertility Services & Training Centre, 100 Bedded Mother & Child Health Hospital.

Study population: Every mother who has had to come to the hospital four times for ANC visit. Mothers who come for delivery only are in the non-exposure group, and those who have been to the hospital four times or more are in the exposure group.

Sample,size determination

It was a cross sectional analytical study conducted in the Mohammadpur Fertility Services & Training Centre. 120 mothers were in a sampling method.

Sampling technique

Their information has been collected from pregnant women through some questions and answers. Among the questions are how old they are and how much they weigh. Women who have completed four ANC visits are placed in the ex-posed group and those who have not completed four visits are not placed in the ex-posed group.

CHAPTER NUMBER 04

4.1 THE TECHNIQUE AND PROCESS OF DATA COLLECTION

Women who come to the hospital for delivery services are taken for data collection and divided among those who have completed 4 visits, those who have made four visits are taken in exposure group and those who do not make four visits are kept in non-exposed group. After 28 weeks, the mother's weight was reflected in the ANC. Their records were followed up. Mothers' burdens were measured when they went to the administration.

It has been measured how much they changed each time they visited the ANC. It has been noted on the ANC card that the change came in them, especially the weight of the mothers, the blood group of the mothers, their physical condition, their sexual relations, their weight gain and their taste. It has been noticed that mothers vomited so much at the time that we recorded the data on a Microsoft Excel sheet for analysis.

A questionnaire was prepared regarding age of mother, profession, socio-economic condition, education, class of family belong to, food habits of mothers and knowledge about breastfeeding etc. supported those questions, the knowledge was collected from mothers who were visited Mohammadpur Fertility Services & Training Centre.

4.2 DATA ANALYSIS

At first recorded the information of the pregnant women in a Microsoft Excel sheet and later we had a meeting with them. Later in our visit we discussed a total of 43 questions and at each step we made new decisions and asked them questions so that we could write down the answers. Later we can make new decisions by analyzing that information.

It has been analyzed that all the completed mothers have very easy delivery. Delivery happens and mothers who can't complete four visits have a complication. Their babies are not all healthy babies. All mothers can leave the hospital very soon. They have to stay in the hospital for a long time. The least number of days have passed. The least number of mothers have been in the hospital for at least one day. If the mothers have to complete the ANC well, then their children are healthy, they are healthy themselves and they can leave the hospital very soon.

CHAPTER NUMBER 05

5.1 THE RESULT

The Participants of base characteristics

A total of 119 pregnant women participated within the study of the health institution. The pregnant mother of MFSTC hospital is participated within the project. They answer the questions and explain their complication, ANC visit times, medical reports. Most of mothers are lived in urban are area and first level educated.

The general characteristics of participants

❖ **Table 5.1: Religion of participants**

Variable	Frequency	Percentage
Muslim	106	89.07%
Hindu	14	11.76%

❖ **Table 5.2: Educational qualification of participants**

Variable	Frequency	Percentage
Not went to school	33	27.73%
Primary	60	50.42%
SSC	18	15.12%
HSC≤	8	6.72%

❖ **Table 5.3: Received TT injection of participants**

Variable	Frequency	Percentage
Yes	95	79.83%
No	25	21.00%

❖ **Table 5.4: Place of residence to the participants**

Variable	Frequency	Percentage
Urban	105	88.23%
Rural	15	12.60%

❖ **Table 5.5: Husband's occupation of participants**

Variable	Frequency	Percentage
Governmental	18	15.12%
Non-governmental	22	18.48%
Day labor	80	67.22%

❖ **Table 5.6: Number of ANC visit of participants**

Variable	Frequency	Percentage
4 or more	33	27.73%
3 or less	87	73.10%

The study found that most of the women were housewives and working boys and their families were very large and most of the lower-class women's husbands were day laborers or private employees. They were not aware of ill health most of them took TT injection is a very important step in the life of girls.

5.2 THE MATERNAL AND NEONATAL COMPLICATIONS INCIDENCE

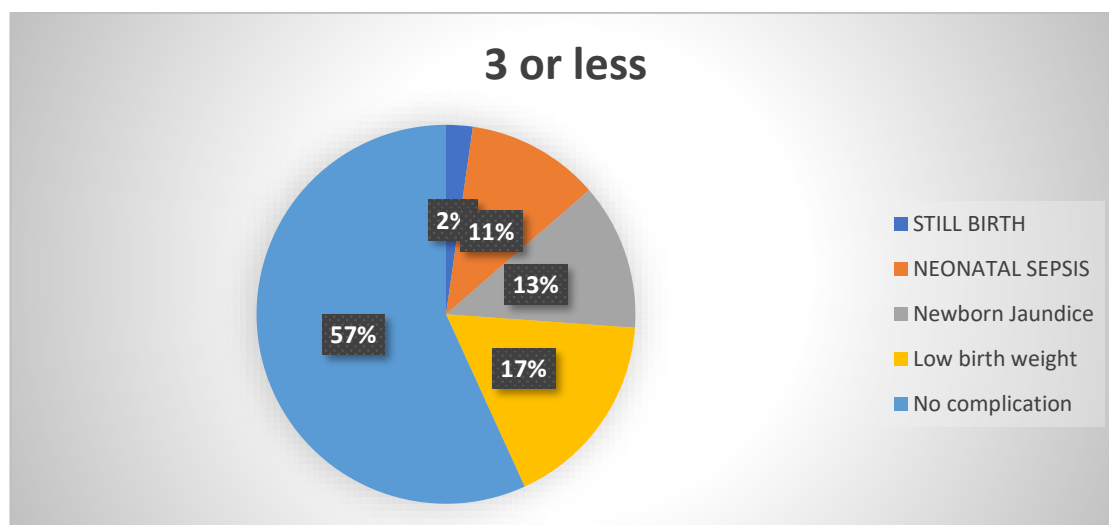
Table 5.7: Effect of ANTENATAL CARE counsel on antepartum problems of participants

		Anemia	Gestational diabetes	Operative and caesarian delivery	Pre-term birth	Neonatal complication
Number Of ANC Visit	4 or more	5	5	9	5	7
	3 or less	8	11	25	11	35

The above table showing:

From the data in the table above we can see that women who have less maternal complications have more ANC counseling. it's seen that the incidence of problems like gestational diabetes, preterm labor, Neonatal complication were all higher for those that had but 3 number of visits to antenatal care services. The table shows that, those that had Operative and caesarian delivery most of them received 3 or less ANC visit. This hospital is specialized for spontaneous vaginal delivery of pregnant mother. they struggle to try to spontaneous vaginal delivery of all the mothers.

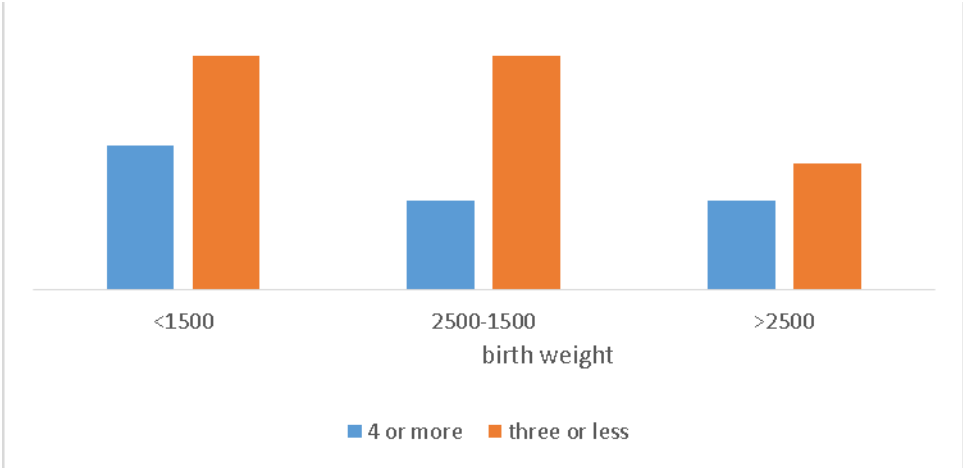
Table 5.8: Effect of ANTENATAL CARE on neonatal health outcomes of participants



		Neonatal Complication				
		STILL BIRTH	NEONATAL SEPSIS	Newborn Jaundice	Low birth weight	No complication
Number of ANC Visit	4 or more	0	2	2	3	24
	3 or less	2	10	11	15	50

The table above shows that one of the reasons why newborns have more complications is because their mothers did not receive ANC services while they were pregnant. Because ANC visit is that the most vital a part of a pregnant mother. those that don't take ANC visit for 4 or longer they face problems. It's vital to possess 4 or more ANC visit for a pregnant mother.

Table 5.9: Relationship of ANC visit with Birth weight of infants



The above figure shows three or a smaller number of ANTENATAL CARE visits was associated with birth weights of <2500 gm. ANC visit of 4 or more days also important for baby’s body weight. Who follows the councilors instructions and do what they told; their baby will be healthy, safe from diseases.

CHAPTER NUMBER 06

6.1 THE DISCUSSION

In light of all the above information and my experience, It has been noted that pregnant women who do not participate in NC counseling at any time often have problems giving birth to a child. One of the things they have to face is that they are not released from the hospital immediately after delivery.

They have to stay in the hospital for some time and receive their services. And they can recover very quickly due to which they have to spend relatively less time in the hospital. There are also complications in the physical ability of children with various diseases including immunity who do not participate regularly. Finally, we can say that NCTB is one of the four most important reasons. In this case the doctors save all their information and change that step by step When it comes to analyzing the changes, they serve them or pregnant women.

Based on my analyzed data, it has been noted that only 27.7 3% of pregnant women fully and four or more ANC participate and a large portion of the rest do not participate in four or ANC counseling. This is certainly a sad thing.[21]

It has been noted that 50.42% mother were primary level student and 27.73% were not go to school. Education is the most important fact to have be healthy. Illiterate people don't care about their health most of the time.

Now there are many hospitals that serve girls and women's TT injections. In the previous time girls might have faced problems to get TT injections. But now its very much easy to take TT injections. Now 79.83% girls took TT injections which is very important part of a girl for being a mother.

By doing the project it has been measured that, there are many complications faced pregnant mothers and new born babies. 7 babies were faced neonatal complications who were taking 4 or more ANC visit but 35 were took 3 or less ANC visit. It shows that by taking those visits, reduce the complications. 11 babies pre term birth and 1 still birth mother took 3 or less visit.

Those who are family welfare inspectors will be able to have a normal delivery (normal delivery) well. Because, they have good training in this regard. We can serve with them until the midwife is hired. There are health family welfare centers in about 3,600 unions in the country. In 650 unions of the country, there are no health care centers other than community clinics. The community clinics in these places need to be made more serviceable. If we can move forward with planning, it will be possible to ensure safe motherhood in the future. Empowerment of women at the community level refers to empowerment and ensuring health services, especially maternity services. Much has been said about this. Some barriers have been identified to ensure safe motherhood. These obstacles need to be overcome through appropriate programs. Four antenatal care should be ensured instead of one.[22]

CHAPTER NUMBER 07

7.1 THE CONCLUSION

Maternity services have improved in Bangladesh compared to the past. But more than that is expected. It is a good sign for the country that many have started taking preventive health care. The latest figures show that three out of every four women are covered by antenatal care (ANC). However, one-fourth of women are not yet covered by medical services. We have to work on it. Appropriate measures need to be taken to determine the exact number of pregnant women.

The number of mothers aged 15 and over is increasing. Their maternal risk is much higher. For this, better care needs to be taken under ANC facility. Conscious and educated women are receiving maternity services on their own. For this, women need to be made aware through education. We have to ensure the empowerment of women in the community. Most of the pregnancy services are being conducted in the private sector. For this, the private sector should be brought under proper rules and regulations.[23]

It is possible to play an important role in pregnancy services by disseminating accurate information through health workers in community clinics.[24]

7.2 THE REFERENCE

- [1] Ntv online, 2015. *গর্ভাবস্থায় অন্তত চারবার চেকআপ জরুরি*. [online] Available at: <<https://www.ntvbd.com/health/21328/%e0%a6%97%e0%a6%b0%e0%a7%8d%e0%a6%ad%e0%a6%be%e0%a6%ac%e0%a6%b8%e0%a7%8d%e0%a6%a5%e0%a6%be%e0%a7%9f-%e0%a6%85%e0%a6%a8%e0%a7%8d%e0%a6%a4%e0%a6%a4-%e0%a6%9a%e0%a6%be%e0%a6%b0%e0%a6%ac%e0%a6%be%e0%a6%b0-%e0%a6%9a%e0%a7%87%e0%a6%95%e0%a6%86%e0%a6%aa-%e0%a6%9c%e0%a6%b0%e0%a7%81%e0%a6%b0%e0%a6%bf>> [Accessed 17 May 2021].
- [2] Opportunities for Africa's newborns, 2007 Ornella Lincetto, Seipati Mothebesoane-Anoh, Patricia Gomez, Stephen Munjanja)
- [3] Porter, Maureen, Simkhada, Padam Teijlingen, Edwin R van; Factors affecting the utilization of antenatal care in developing countries: systematic review of the literature Issued: January 2008
- [4] Antenatal care - UNICEF DATA, 2021)
- [5] World Health Organization (2001) WHO recommendations on antenatal care for a positive pregnancy experience, (WHO/FCH/CAH/01.24).
- [6] (IDHS: Physical Examination, 2021)
- [7] Antenatal care Quality Standards, QS22 - Issued: September 2012
- [8] Harper, Douglas. "neonatal". Online Etymology Dictionary. Douglas Harper. Retrieved October 26, 2010
- [9] Pay AS, Frøen JF, Staff AC, Jacobsson B, Gjessing HK. A new population-based reference curve for symphysis-fundus height. *Acta Obstet Gynecol Scand* 2013; 92: 925-33
- [10] Mishra, V., Retherford, R.D. The Effect of Antenatal Care on Professional Assistance at Delivery in Rural India. *Popul Res Policy Rev* 27, 307–320 (2008). <https://doi.org/10.1007/s11113-007-9064-3>
- [11] Abdalla, G. M. (1993). Determinants of maternal and child health services utilization in Egypt. In CDC 23rd Annual Seminar on Population and Development

Issues in the Middle East, Africa and Asia, compiled by Cairo Demographic Centre, Cairo, Egypt.

[12] Ahmed, S., & Mosley, W. H. (1997). Simultaneity in maternal-child health care utilization and contraceptive use: Evidence from developing countries. Hopkins Population Center Papers on Population, WP 97-03. Baltimore MD: Department of Population Dynamics, School of Public Health, Johns Hopkins University.

[13] Govindasamy, P., & Ramesh, B. M. (1997). Maternal education and the utilization of maternal and child health services in India. National Family Health Survey Subject Reports, No. 5. Mumbai: International Institute for Population Sciences; and Calverton: Macro International, Demographic and Health Surveys (DHS).

[14] Mustafa HE, Odimegwu C. Socioeconomic determinants of infant mortality in Kenya: analysis of Kenya DHS 2003. J Humanit Soc Sci. 2008;2(8):1934–722.

[15] Gage TB, et al. Maternal education, birth weight, and infant mortality in the United States. Demography. 2013;50(2):615–35.

[16] Aquino R, et al. Impact of the family health program on infant mortality in Brazilian municipalities. Am J Public Health. 2009;99(1):87–93.

[17] Sayem AM, et al. Achieving the millennium development goal for under-five mortality in Bangladesh: current status and lessons for issues and challenges for further improvements. J Health Popul Nutr. 2011;29: 92–102.

[18] GoB, B., SID, UNICEF. Multiple Indicator Cluster Survey, 2012–2013. 2015.

[19] Health Bulletin. Government of the People's Republic of Bangladesh, Ministry of Health and Family Welfare, MIS. Bangladesh: DGHS; 2017.

[20] UNICEF. Neonatal Mortality. Online (Access on 12 July 2017). <https://data.unicef.org/topic/child-survival/neonatal-mortality/>.

[21] Ahmad OB, et al. The decline in child mortality: a reappraisal. Bull World Health Organ. 2000;78:1175–91.

[22] Kim D, Saada A. The social determinants of infant mortality and birth outcomes in Western developed nations: a cross-country systematic review. Int J Environ Res Public Health. 2013;10(6):2296–335.

[23] UNICEF. World bank; United Nations. Levels & trends in child mortality report 2014: estimates developed by the UN InterAgency Group for Child Mortality Estimation (cited 2015 Feb 17). 2014

[24] Van Eijk AM, et al. Use of antenatal services and delivery care among women in rural western Kenya: a community based survey. *Reprod Health*. 2006;3(1):1.