

## **An Internship Report**

## On

Work Experience On Nutrition Counseling of Child and Breastfeeding Practice of Lactating Mother

#### Attended at

**Mohammadpur Fertility Services and Training Center** 

#### **SUPERVISED BY**

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#### **SUBMITTED BY**

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Date of submission: 08.12.22

## LETTER OF TRANSMITTAL

Date: December 8, 2022

Dr. Nizam Uddin

Associate Professor & Head In-Charge Department of Nutrition and Food Engineering Faculty of Allied Health Sciences Daffodil International University

**Subject: Submission of internship report** 

Dear Sir,

With great pleasure, I would like to take this opportunity to thank you for the advice and assistance you have provided me during the course of this report. Without your help, I couldn't have finished this report successfully. I submit my internship report on "Work Experience on Nutrition Counseling of Children and Breastfeeding Practice of Lactating Mothers Attended at Mohammadpur Fertility Services & Training Center. Internship is a part of the Bsc in NFE program curriculum. It is a great experience to work in the nutrition and breastfeeding counseling sector at MFSTC for 30 days under the supervision of UHM Shahnaz Titthi, senior nutritionist in the nutrition counseling department of MFSTC Hospital. My experience throughout my internship was both intellectual and practical. First, I learned about the methods for nutritional assessment of children, infants, newborns, postpartum women, and children of different ages, as well as nutritional counseling. Secondly the internship gave me the chance to improve my academic knowledge about counseling lactating mothers about their breastfeeding techniques. I worked quite hard to finish my intern report and did my best to learn something from my internship.

I am submitting this report for your kind consideration, and I would be very grateful to you if you were kind enough to receive, check, and provide your valuable opinion. Once more, I want to thank you for your help and tolerance.

Yours Sincerely,

**Purabi Ghosh Shetu** 

Porabi

ID: 181-34-770

Department of Nutrition and Food Engineering

**Daffodil International University** 

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## LETTER OF AUTHORIZATION

Date: 08-12-2022

#### Dr. Nizam Uddin

Associate Professor & Head In-Charge
Department of Nutrition and Food Engineering
Faculty of Allied Health Sciences
Daffodil International University

Subject: Declaration regarding the validity of the Internship Report.

#### Dear Sir,

This is my sincere and honest declaration that the "Internship Report" I have made entirely original to me and not a copy of any previous Internship Report done by any other students.

I would also like to confirm that the report is founded on lessons I learned through the internship. I didn't include any topics that were unfair or that I had already obtained. I wish to assure you that this report wills no further use for another purpose.

Yours Sincerely,

**Purabi Ghosh Shetu** 

ID: 181-34-770

Department of Nutrition and Food Engineering

**Daffodil International University** 

LETTER OF RECOMMENDATION

This attests to the internship report's authorization of "work experience on nutrition

counseling of child and breastfeeding practice of lactating mother" Attended at

Mohammadpur Fertility Services and Training Center. The author and submits this for

review by the examination committee by Purabi Ghosh Shetu, student Id: 181-34-770,

Department Of Nutrition and Food Engineering (NFE), Faculty of Allied Health

Sciences, Daffodil International University.

I'm delighted to say that this article is totally the author's effort, I strongly advocated for

the expert's approval of the report and for a positive and objective assessment of the

effort.

Sincerely yours,

Balled

Professor. Dr. Md. Bellal Hossain

Associate Dean

Faculty of Allied health sciences (FAHS)

Daffodil International University (DIU)

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## APPROVAL CERTIFICATION

This is to certify that **Purabi Ghosh Shetu** bearing ID: 181-34-770, Program B.Sc. in Nutrition and Food Engineering is a regular student of department of Nutrition and Food Engineering, Faculty of Allied Health Science, Daffodil International University. She has successfully completed her internship program of one month at MFSTC (Mohammadpur fertility services and training center) in Dhaka on "Work Experience on Nutrition Counseling of Children and Breastfeeding Practice of Lactating Mothers" and completed this report on November 8, 2022, under my direct report, is worthy of fulfilling the partial requirements of the NFE program. I wish her all success in life.

Dr. Nizam Uddin

Associate Professor & Head In-Charge

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## **ACKNOWLEDGEMENT**

First of all, my all praises, gratitude and thanks goes to the to the Almighty Allah, the most beneficent and most merciful who manages each and everything soundly and has made this work successful. Without his blessings, none of this world has been possible.

My deepest gratitude and truthful thanks to the honorable Dean, **Professor Dr. Abu Naser Zafar Ullah, Dean and Professor,** Daffodil International University, Faculty of Allied Health Sciences, for his kind cooperation during my study period and specially for his kind acceptance of this report.

I would like to express my great respect & warmest thanks to my academic supervisor **Professor Dr. Md. Bellal Hossain**, **Associate Dean**, Daffodil International University, Faculty of Allied Health Sciences (FAHS); for his constructive suggestions, effortless guidance, continuous support and whole-hearted supervision throughout my internship which has helped me immensely to complete this work successfully.

At the same time, I would also like to express my great respect to my Department Head, **Dr. Nizam Uddin**, Daffodil International University, Faculty of Allied Health Sciences (FAHS); for his kind cooperation and encouragement to assign and accept this Internship Report.

My gratitude goes to my internship supervisor **UHM Shahnaz Farid Titthi** principle Nutritionist of MFSTC Hospital for helping me with her valuable suggestions regarding internship. I am also grateful to Jannatul Quoser, Counselor of neonatal and breast feeding department of MFSTC Hospital. It would have been very difficult to prepare this report up to this mark without their guidance. I am also thankful to Muniruzzaman Siddiqui, director of MFSTC

I am also thankful to all NFE faculty members specially my batch advisor Senior Lecturer Effat Ara Jahan, Senior Lecturer Tasmiah Tasnim, Assistant Professor Nasima Akter Mukta, Senior Lecturer Juwel Rana, Senior Lecturer Harun-Ur-Rashid, Lecturer Humyra Nowshin, for their countless inspiration and encouragement during my student life.

## **SUMMARY**

This internship at MFSTC Hospital become well-prepared through the authorities and furnished me with precious exposure.

I am very happy and satisfied that I have learned new things, developed new skills, and succeeded in a lot of my learning goals. I was assigned internal tasks and duties that were handled by a medical and clinical dietician. This internship will help me identify both my skills and flaws, which is another great benefit. This chance enables me to identify the skills and pursuits that I should evaluate practically in order to gain the knowledge and develop my own capabilities in the future.

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## **LIST OF ABRIVIATIONS**

Acronym **Explanation** ANC Ante Natal Care CS-Caesarean Section **PNC** Post Natal ca Care PAC-Post Abortion Care NC-**Nutrition Counseling** OPD-Oral Pill Distribution IUD Intra Uterine Device MR-Menstrual Regulation IIS-Implant Insertion Service NHC-Neonatal Health Care COS-Central Oxygen Supply BFC-**Breast Feeding Counseling** SWD-Social welfare Department AHC-Adolescent Health Counseling PPFP-Post Partum Family Planning OIH-Ovulation Induction by Hormone ARHC -Adolescent Reproductive Health Care ECP-Emergency Contraceptive Pill Service

## **CHAPTER - ONE**

#### INTRODUCTION

#### 1.1 Introduction

#### **Nutrition**

Nutrition is the major source of energy that can be obtained from various kinds of foods and which is consumed by us for our proper nourishment and well-being. Furthermore Nutrition can be defined as the branch of science that deals with the nutrients particularly in human. Food is consumed and used for growth, development, metabolism, and repair, which is the process of nutrition. The consumption of food also satisfies the body's dietary requirements for normal bodily function. Typically, 80% of the calories and energy we consume each day are provided by fat and carbs, while 20% come from foods that contain protein. For a healthy lifestyle, a balanced diet is crucial.

The examination of the nutritional needs of children Is an important age range. The act of breast-feeding an infant is essential to the growth of the youngster. After giving birth, a woman's nutritional demands, as well as those of her infant, considerably rise. Appropriate nutrition is of the utmost significance to the growth of a kid, and a woman's ability to properly feed her baby is essential. It is very important for the child's growth that the mother maintains good health all during the pregnancy and while she is nursing. Because of this, it is of the utmost importance for a woman to maintain a healthy diet while she is breastfeeding in order to provide her child with all of the necessary nutrients that he or she need. A research on the impacts of diet found a connection between having a normal birth weight and having normal brain development in early childhood. On the other hand, the youngster is at risk of developing a variety of health problems if they aren't receiving enough to eat. A poor diet during pregnancy may lead to a baby being born with a low birth weight. This, in turn, can impede the growth of the embryo and raise the likelihood that the baby will be delivered prematurely. According to the findings of one research, inadequate nutrition during pregnancy accounts for around a quarter of all cases of infants being delivered with an abnormally low birth weight. It is beneficial for moms to participate in breastfeeding therapy because it assists them in perfecting their technique, coping with bodily changes, and feeling more confident overall.

## **Breastfeeding**

Pregnancy and early childhood are the periods of rapid physiological growth and cognitive growth. Inadequate intake of these nutrients causes impairment of the physiological and mental growth of the child. For these reason most of the project try to teach the pregnant and 'recent delivery' women about the importance of taking nutritious and balanced diet during pregnancy and foster them to feed their child and family healthy and nutritious foods.

Breastfeeding is a successful intervention to ensure optimal technique, assist women in adjusting to physical changes, and boost confidence. Breastfeeding counseling are excellent at encouraging both exclusive breastfeeding and breastfeeding after six months. Breastfeeding counseling may involve watching the mother feed the child, noting the mother's breastfeeding history, listening and providing support, as well as evaluating and helping the mother make changes to her breastfeeding routine.

## 1.2 Origin of the report

For NFE students, completing the internship program is a requirement for graduation. The NFE internship program at Daffodil International University includes this course as a partial prerequisite. The primary goal of the internship is to expose the student to the working world. This report is the outcome of an internship program that took place at the MFSTC hospital for one month. It was commissioned and approved by Chief Dietitian UHM Shahnaz Farid Titthi and approved by the faculty supervisor of Professor Dr.Bellal Hossain.

## 1.3 Start of the report

Internship program is an essential part of our graduation course. It is the final part of our course. Our final component of graduation and key to our successful careers was the internship program. As a student in the department of nutrition and food engineering, we must perform an internship in a hospital as part of our training because it is crucial for developing the idea of planning that comes from legal education. This internship program is crucial to learning all of the nutritional terms that are important to our good health. Practically speaking, I have a problem with learning. The ability for a student to learn about the key elements of the health business makes internship programs a good way to fill up some gaps.

The report Is created by the curriculum of the B.SC. In The Nutrition and Food Engineering program. The theme of my internship report is a counseling of "Training and work/working Experience on Nutrition counseling of child and breastfeeding practice of lactating Mother Attended at Mohammadpur fertility services & training center"To achieve this goal, I have performed their guidelines, counseling process and capable performance nearly. I did my Internship program as a regular student and as per advice of my university Supervisor and departmental Dean "Prof. Dr. Md. Bellal Hossain. I have chosen the main theme as lactating mother's breastfeed counseling and nutrition for child.

## 1.4 Objective of the program

The main goal of this report was to fulfill the requirements for the B.Sc. in Nutrition and Food Engineering program. This internship program carries three credits and seeks to establish a connection between knowledge and experience and matters of fact. Only with the practical implementation of deliberate thought which we study and become erudite from our academic performances, can one learn a brief lesson about the knowledge to the instant health stroll.

Regarding the internship program's objective, the development's focus is on pregnant women's and kids' health. Some people are unaware of the three trimesters of pregnancy, the need of eating healthfully, certain techniques, or breastfeeding. They don't know enough about infant nutrition, the value of breastfeeding, or adolescent health. The majority of people do not support family planning. Consequently, this is the governmental organization and family planning hospital that is a part of the 100-bed mother and child hospital of the fertility service and training center.

## **CHAPTER - TWO**

## **Mohammadpur Fertility Services & Training Centre**



## 2.1 Historical Background Of MFSTC (MA O SHISHU HOSPITAL)

The Mohammadpur Fertility Services and Training Centre (MFSTC) was founded in 1974 as a special project with financial support from the "Pathfinder Fund" with the goal of providing integrated family planning services under one roof. It is situated on Aurangzeb Road in Mohammadpur, Dhaka.

A really special project was created for the poor people. This center conducted its maturation and initially introduced the MR service, habitat. The success of women's services in today's world that attest to their claim of generative health is confirmed by MR. This MR offers identification services for some problems and concept failures. It has begun providing clinical post-abortion care (PAC) services. We concentrate on the primary factor causing MR difficulties and the abortion reality. Every year, 80% of the clients in this center who are in the middle and lower income brackets who represent this vagueness and its good representation and performance are visited. They also receive high-quality counseling, all records and patient data are kept, and all clients and patients are given follow-up care. In order to continue the MFSTC's current activities, it is progressively growing by introducing infertility and comprehensive reproductive health care services. The main function of this hospital was the Introduction of newborn, baby, and child nutrition counseling, and the majority of routine deliveries were converted to cesarean sections in order to provide ongoing care. Additionally, they receive guidance on healthy eating for new mothers, babies, and lactating women. The MFSTC hospital's service center was formed with the goal of becoming more knowledgeable in the fields of family planning and maternal and child health care. All doctors displayed excellent delightful helpful friendliness toward their patients. Their desire to give every customer the greatest service satisfies their requirements, demands, and all desirable things. To improve the quality of pregnancy outcomes, newborn babies' care, nutritional advice, breast-feeding, and neonatal care

#### 2.2 Mission

All patients must exhibit good behavior and receive services for nutrition and family planning.

Quality to provide:

- 1. Give mothers the best possible care.
- 2. The response with the intention of completing the health counseling
- 3. Offer all pregnancy-related health advice.
- 4. Offer health advice to children aged 10-15.
- 5. Care for mothers and children is their overall mission.

#### 2.3 Vision

The vision of MFSTC is to provide all clients with high-quality, cost-effective healthcare that promotes productivity. They mainly provide Family Planning Especially Fertility Services, Mother and Child Health Care. They are recognized for their commitment to maternal health care during pregnancy, normal delivery attempts, and the provision of all necessary medications for mothers and children.

#### 2.4 Goal

The ultimate objective of this institute is to raise mother and child nutrition and health. Also to help Bangladesh achieve its goal for family planning.

## 2.5 Review Of MFSTC Hospital

The MFSTC hospital's service center was established with the intention of supporting intelligent development in the project linked to family planning as well as maternal and child health care. An terrific and delightful relationship between all of the physicians and their patients that was thoughtful and helpful. Their dedication to providing each customer with the best service that can be provided meets the prerequisites, wants, and needs of those customers. to achieve better outcomes in terms of pregnancy, care for newborns, nutritional counselling, and breastfeeding, as well as improved neonatal care outcomes.

## 2.6 Department & Service of MFSTC Hospital

## A. Family Planning Service

#### **Birth control injection**

Injections of hormones into a patient's body are what are referred to as "birth control injections," and they are effective in preventing unintended pregnancies for a period of three months in a row. Since the hormone known as progestin is contained within the shot, its effectiveness as a method of birth control is comparable to that of the birth control pill. It is not an effective method of preventing pregnancy. A hormone that is injected into the body as part of a contraceptive injectable is what prevents eggs from being released into the body in the first place. Injectables are a form of birth control that, when used appropriately, are one of the most effective methods available. The injection needs to be administered on a set schedule of approximately once every three months or once every 12 weeks, and it is administered into a muscle (typically the arm or the leg).99% - If 100 women used an injectable for a year and continued to have normal sex lives, only one of those women would become pregnant during that period.

#### Oral pill distribution

The combination oral pill, often known as the contraceptive tablet or in more common parlance simply as "the tablet," is a kind of starting pill that is intended to be taken orally by means of women. It is commonly known as "the tablet." The pill contains both progestin and estrogen, two key hormones in the reproductive system. It is referred to as fertilization, and its purpose is to stop sperm from joining with the egg to form a fertilized embryo. Controlling the delivery of hormones for the pill may put a halt to ovulation and stop the process that leads to the start of a pregnancy. After ovulation, there is no ovum left in the uterus for the sperm to fertilize, therefore the possibility of pregnancy is eliminated. Hormones ingested orally have the same effect of thickening the mucus produced by the cervix. Because of this, they provide these medications to the customers under their care.

#### Post partum family planning

Postpartum family planning refers to the practise of using birth control methods during the first year after a woman has given birth in order to avoid unintended pregnancies and pregnancies that are closely spaced. Postpartum contraceptives reduce the risk of death for both mothers and newborns by preventing unintended and unwanted births and delaying subsequent pregnancies for a period of at least two years after the completion of a previous pregnancy. Women should start using a modern method of contraception as soon as possible after giving birth, and they should continue using it or another method for at least two years, in order to ensure that their pregnancies are spaced and timed in the most effective manner possible.

#### **Implant insertion service**

For the purpose of keeping sperm from accessing the egg, the implant releases a progestational hormone. In most cases, the implant also prevents ovulation. The implant service still employs this technique for birth control planning. The hormone supply and running out of this procedure are broken down after three years, at which point the implant starts to function. It is a long-term approach to birth control. Under the skin of the upper arm, the contraceptive implant is placed. To stop sperm from reaching the egg, the implant releases a progestational hormone. Ovulation is often suppressed by the implant as well. It begins working right away if placed during the first five days of your menstrual cycle, which begins on the first day of bleeding.

#### Sterilization of both male and female

Sterilization is a form of birth control that is effective for a lifetime. Techniques for the sterilization of women are often referred to by the terms "female sterilization" or "tubal sterilization." The operation that is performed on males is known as a vasectomy. It is generally accepted that the sterilizing procedure is one that does not include any risks and just minimal amounts of hassle. The process of sterilization requires the removal of certain sexual characteristics. Vasectomy, which is also often referred to as male sterilization, is a procedure that prevents sperm from entering a man's semen or the fluid that he excretes in order to sterilize the man. It does this by applying heat to the tubes that carry sperm from a man's testicles to his penis, and then severing those tubes.

#### Service for emergency contraceptive pill

Emergency contraception may prevent pregnancy from occurring after unprotected sexual activity or when other methods of birth control have failed. The usage of medications in an emergency situation works mostly by assisting in the destruction of the egg that is released from the womb and increasing the amount of ovulation that occurs using the same hormones that are used in daily management procedures. Once implantation has taken place, emergency contraception is rendered ineffective and cannot prevent pregnancy. It is a simple and uncomplicated process to administer the contraceptive pill to someone who is serving as an emergency provider.

#### Distribution of condoms to men

The distribution of condoms is an example of a structural intervention that may save costs while also providing communities with the tools they need to combat the spread of HIV.Don't charge for the condoms you hand out. It is recommended that a wide dissemination be undertaken. In addition, it may be used as a method of birth control. Programs that distribute condoms are an example of a structural intervention. These programmes use the distribution of condoms as a method for halting the spread of the HIV virus. Protect yourself and others with the HIV prevention strategy developed by the Centers for Disease Control and Prevention (CDC). It is essential that this be done in order to protect the efficacy of birth control on males.

#### (USG) Guided removal of missing implant service

Sonography was used in this service to aid the removal of soft hands. Without the need for more intrusive treatments like hysteroscopy to remove the system and remove soft tissue in the hands utilizing this process of implant, the use of ultra sound guidance may increase the success rate of IUS removal.

#### (IUD) Intra uterine device service

An intrauterine device (IUD) is a very small T-shaped device made of plastic and copper that is inserted into the uterus by a medical professional. Copper ions are released, therefore preventing pregnancy and providing protection for a period ranging from five to 10 years. Copper IUD devices and hormonal IUD devices, both of which incorporate a trace amount of copper and give pregnancy prevention for a period of 12 years, are the two kinds that fall under the umbrella of the intrauterine device services that are provided. Make this service available to them if they would want to make use of it.

#### Hysteroscopy guided removal of missing IUCD

In the event that removal of the IUD using ultrasound guidance is unsuccessful, hysteroscopic guidance could be attempted instead. By using this approach that only requires a limited amount of surgical intervention, it is possible to circumvent the need for big procedures and eliminate associated challenges. It is a technique of birth control that makes use of the coil, which is a little contraceptive device that is typically in the shape of a T. which are placed within the uterus of a woman in order to prevent her from becoming pregnant. This is one method of reversible contraception that has a long-acting effect.

#### **B. MCH SERVICES**

#### Ante natal care service

It is impossible to stress the importance of receiving prenatal care for a child. Antenatal care is very efficient for a child. ANC stands for a routine check-up after each pregnancy trimester. The emphasis of this kind of medical therapy is placed on preventative measures. It is possible to conclude that a person had access to and used prenatal care based on the availability of antenatal care (ANC), which is an abbreviation for "antenatal care." During the prenatal period, pregnant women may be offered therapies that have the potential to be highly helpful not only to their personal health and wellbeing but also to the health of their unborn children. These treatments may also be offered to pregnant women who have already given birth. Services associated with prenatal care that foster healthy lifestyles that are good to both the mother and the child, and assist to prevent future health issues that may emerge as a result.

#### Post natal care

After the first six weeks of the mother's pregnancy have passed, the needs of the newborn child are quickly addressed. This is because the mother's body has developed enough to meet these demands. Postnatal care is the care that is provided to a newborn infant beginning within the first 24 hours after delivery and continuing for the first six weeks following birth (PNC). A more in-depth and rigorous analysis of the care that was given to the mother and the infant is incorporated in the postnatal care that is delivered. The first forty-eight hours after giving birth are a crucial time period for securing the survival of new mothers and their newborn kids. This is because the placenta is still quite fragile at this time. Postnatal care that is quick and sufficient should be advocated as a technique for decreasing mortality rates for moms as well as babies. This would apply to both populations (PNC).

#### Caesarean section (CS) delivery service including

A caesarean delivery, sometimes referred to as a C-section, is a kind of childbirth that requires the mother to undergo surgery in which incisions are made in both the abdominal cavity and the uterus. It is not uncommon to hear a caesarean section referred to by its more common shortened name, the C-section. At this particular hospital, every effort is made to perform a natural childbirth; however, some mothers who are underweight or who are having issues during labour are counselled to have a caesarean section performed instead. This decision to have a caesarean section performed is made after careful consideration. These days, having a caesarean section is one of the most common ways to give birth. Our team of medical experts includes obstetricians, certified nurse midwives, nurses with expertise in labour and delivery, postpartum nurses, and nurses with further training in postpartum care.

#### Distribution of vitamin A capsule

It has been shown that giving children vitamin A supplements may lower the chance of blindness, as well as the risk of morbidity and mortality. Pills containing vitamin A are being distributed to guarantee that there will not be a problem caused by a shortage of vitamin A. Children in Bangladesh who are between the ages of 12 and 59 months old are eligible to receive vitamin A capsules (also known as VAC) from the country's government. The benefits that come along with using this service referring to the practise of protecting against illness via the use of vaccines. In order to make sure that everyone receives the same level of care, it is essential to address the medical needs of infants and toddlers who are between the ages of four and six months. These infants are anywhere between four and six months old at the present time. The condition is referred to as "bilharzia" in Bangladesh, where it is one of the leading causes of illness, death, and childhood blindness.

## Sick children less than 5 years

Children less than five years old have an increased likelihood of developing infectious illnesses such as tuberculosis, HIV, malaria, pneumonia, and diarrhea. These children also have a higher mortality rate from these infections. Children of a more mature age are at a greater risk of experiencing major injury as a result of acts of aggression, non-communicable illnesses, and injuries. When one or more of the key symptoms are present, it is beneficial to ask additional questions to assist in the diagnosis and treatment of the disease. This may be done in order to get a better understanding of the patient's condition. Examine the youngster for indications of anemia in addition to those of malnutrition. Evaluate the mother's additional worries and double check that the child's immunization history is accurate.

#### Adolescent reproductive health care

In order to qualify for the services provided at the Mohammodpur Fertility Services and Training Center, a young person must demonstrate initiative in their daily lives and strive toward the accomplishment of their objectives. In addition to giving users access to a vast amount of information on sexual health through the internet. Teenagers now constitute around 40 million of the country's total population, making them the most numerous generation in the United States. Every year, a significant number of young women give birth to children even if they did not plan to do so. Complications that occur during pregnancy and delivery are the biggest cause of mortality for women in the United States who are between the ages of 15 and 19, according to the Centers for Disease Control and Prevention. Care for the reproductive health of adolescents comprises a broad spectrum of interventions aimed at enhancing the adolescents' overall physical, psychological, and social well-being. Counseling on proper nutrition and the provision of this service need to be made available to children who are between the ages of 10 and 15 for the purpose of their overall health.

#### MR & post abortion

The abbreviation MR stands for "menstrual regulation." A method of birth control known as the mini-reversal (MR) is advantageous in that it is risk-free, efficient, and economical. When a woman's menstruation stops because of an infection or a septic issue, menstrual regulation, often known as MR, is a treatment option that may be considered. Patients will typically get MR services from management or general family planning counsel the vast majority of the time. Women who have had an abortion are given access to therapy and counselling as part of the post-abortion care that is offered to them (PAC). It encompasses both curative therapy and medical care, such as the management of difficulties related with abortions.

#### Immunization including hepatitis-B vaccine

Those who are at a high risk of infection as a consequence of their way of life or their area of origin are encouraged to be vaccinated against hepatitis B. This is the recommended course of action. This encompasses adults and children, as well as diabetic mothers and their offspring. The hepatitis B vaccine is a preventative measure that may be used to stave against the illness. It is advised that the first dosage be given during the first twenty-four hours following delivery, followed by two or three more dosages.

### Nutrition advise service of pregnant mother & malnourished children

Inadequate dietary and nutritional intake is a problem for the vast majority of the world's population that lives in poverty. They have a low income and are experiencing financial difficulties, both of which have led to a shortage of food. As a consequence, they are malnourished, and as a response, they provide their children with healthy meal plates and meal cards in addition to offering some nutritional suggestions. The phrase "nutrition and pregnancy" may refer to both the process of planning one's diet as well as the act of ingesting nutrients before, during, and after a pregnancy has taken place. It can also refer to the practise of breastfeeding after a pregnancy has taken place. From the moment of conception forward, the developing embryo has a need for nutritional intake. Because of this, the nutrition of the mother is very essential from the moment conception occurs all the way through pregnancy and nursing. This is something that should be considered from the very beginning. There are four basic categories that may be used to classify the signs of malnutrition. These categories include wasting, stunting, underweight, and deficiencies in vitamins and minerals. Malnutrition is a disease that arises when a person's body does not acquire enough of the vitamins, minerals, and other nutrients that are essential to sustain proper tissue and organ function. This may lead to a variety of health problems, including premature death.

#### **Breast cancer screening**

Breast cancer screening is the process of examining a woman's breasts to detect cancer before any symptoms of the disease become apparent.

#### Visual inspection of cervix with acetic acid

Naked eye examination of the uterine cervix using acetic acid is performed after applying 5% acetic acid and analyzing the results after one minute.via test is crucial for all females. It revealed precancerous lesions in the test. Which is percent of cervical cancer using visual Inspections with acetic acid.

#### Management treatment of referral cases

It is referred to as "referral management," and its description includes the term "referral management." Referral management refers to the management of the process through which patients go on to the next stage of their treatment. At one level of the healthcare system, patients who have been referred to a health professional are managed via a process that is affected by a range of circumstances. This process takes place at a level of the healthcare system (such as medications, equipment, expertise, and so on)

#### **STI & RTI service**

STIs, also known as sexually transmitted diseases (STDs) and the earlier term venereal diseases, are illnesses that may be communicated by participating in sexual activity, most notably vaginal intercourse, anal sex, and oral sex. Other names for STIs include sexually transmitted diseases (STDs) and venereal diseases. These forms of sexual activity provide the highest risk of transmitting an infection.RTI is an abbreviation that stands for "infections of the reproductive tract." When two people have sexual contact, there is a possibility that bacteria, viruses, or protozoa, which are all capable of causing sexually transmitted infections (STI), will be passed from one person to the other. Alterations in the natural flora of the body, as well as certain medical treatments that have the potential to cause iatrogenic infections, may both contribute to the development of RTIs, which are diseases that are not transmitted through sexual contact. RTIs can be broken down into two categories: those that are caused by changes in the natural flora of the body, and those that are caused by changes in the natural flor To put a stop to the transmission of HIV as well as to enhance sexual and reproductive health, having a strategy in place is very vital.

#### Indoor service of pediatrics care

With the most recent research on all facets of hospital and newborn care, this pediatrics care of child health care comprehensive source is available to all child health care specialists and pediatricians.

## C. Education & Counseling Service

#### **Nutrition counseling**

Individual eating habits and their connection to health are examined in nutrition counseling. Nutrition counseling is a continuous process in which a Registered Dietitian/Nutritionist (RD/RDN) collaborates with a person to evaluate his or her typical food intake and pinpoint areas that require modification. A method whereby a health care provider with nutrition expertise aids individuals in choosing healthy foods and developing wholesome eating habits. Make fruit and vegetables the majority of the child's meal. Pick protein-rich foods like eggs, almonds, and lean meat that are beneficial for you. Due to their high fiber content, provide whole-grain breads and cereals.

### **Breast feeding counseling**

For the mother and newborn baby, breast feeding services are a very important service. They provide counseling to address breast problems, monitor breast feed issues, and instruct on how to breastfeed children. Unquestionably, from birth to six months of age, exclusive breastfeeding is essential for supplying the body with the necessary nutrients. Its impact on a baby's growth and development is unsurpassed. Prenatal and postpartum periods, as well as up to 24 months or beyond, should both include breastfeeding counseling (recommended, moderate-quality evidence). At least six times, and more frequently as necessary, breastfeeding counseling should be offered (recommended, low-quality evidence). It is impossible to overstate how much of a difference it can make to a child's growth and development. Education and assistance in nursing should be offered throughout the whole of the breastfeeding experience, beginning with pregnancy and continuing far into the first year and beyond (recommended, moderate-quality evidence).

#### Antenatal and postnatal counseling

Counseling is offered to all expectant women at the Midwifery and Family Support Services Center, both after the delivery of the baby and before. Also, make sure that you check in on a continuous basis and at least once a month. It is possible for a mother's understanding of the care she should obtain before, during, and after her pregnancy to be enhanced by the process of receiving prenatal care. One of the most important aspects of the ANC The provision of nutritional education and support, aid in ceasing drug use, adoption of family planning techniques, comprehension of possible hazards, and

preparation for giving birth are all examples of activities that contribute to the promotion of health and wellbeing. Both the mother and the newborn should be inspected by a trained professional in the field of medicine during the first twenty-four hours following the birth of the new baby. Postnatal care is the name given to the care that is provided to the mother after the birth of the baby. During this time, both the mother and her child will be subjected to the many clinical examinations that are considered to be industry standard.

#### **Client counseling**

They are curious in the client's struggles during pregnancy, infections, problems with infertility, and potential remedies to male and female sexual diseases. In addition, they are interested in hearing about potential treatments. Students of law have a significant need to acquire and have to be instructed in the crucial skill of client counselling. The term "individual counselling" refers to a session in which the client (also known as the person who is searching for treatment) meets with the therapist on an individual basis for the duration of the session. In order to foster trust in one another and further their own individual development, the two sides work out a compromise, form a partnership, or establish a bond with one another.

#### **Adolescent health counseling**

Children and women who are experiencing health problems are offered access to the adolescent health counseling program. Compared to young children and adults, adolescents have particular nutritional needs. Adolescents must practice healthy eating because of the changes in their bodies, which have an impact on their dietary and nutritional requirements. Teenagers are becoming more self-reliant and making more independent eating choices. Teenagers often go through a growth spurt and an increase in appetite, so they require nutritious foods to suit their demands. Teenagers are gaining a stronger feeling of independence and are becoming more self-directed in the choices that they make about their food. Teenagers often go through a phase of fast growth that is accompanied by an increase in hunger. As a result, they have a greater need for meals that are rich in nutrients since their appetites have risen.

## **D.** Infertility Services

#### To give assurance to the long term contraceptive users

The long-term users of contraceptives to guarantee their demands, issues, and they provide their birth control techniques. The women who have used birth control techniques for an extended amount of time in order to secure the supply of their requirements, issues, and birth control procedures are the women who have used birth control methods for an extended period of time. In the event that they choose to do so. Intrauterine contraceptive devices (IUDs) and birth control implants are examples of procedures that fall under the category of long-acting reversible contraceptives (LARC). These two approaches are equally effective in terminating a pregnancy at its earliest possible stage. They are simple to use and may be utilized for a really extended period of time. Both of these procedures can be undone, which means that you may have them removed at any moment if you decide that you no longer want to use them or if you decide that you want to have a family in the future. Oral contraceptives, injectable contraceptives, intra uterine contraceptive devices, condoms, and emergency contraceptive pills are all examples of methods that either prevent reproduction entirely or restrict reproduction to a certain extent.

#### Couples are counseled about infertility

Infertility is a condition that may be diagnosed in a couple when they have been sexually active without protection for at least a year and are unable to conceive a child or get pregnant. The programme for the treatment of infertility that is part of the programme for birth control also treats infertility. This programme addresses the structural issue that is present within several approaches to the treatment of infertility, such as tube connections. Infertility is not something that just affects women; men might also be susceptible to having it. Males are not immune to the possibility of sterility. In point of fact, the chance of infertility is really close to being the same for both men and women. The assisted reproductive technology (ART) method that treats the greatest number of patients is called in vitro fertilization (IVF). In vitro fertilization (IVF) is a process that involves the activation and removal of several mature eggs, followed by the fertilization of those eggs in a dish with sperm in a laboratory, and finally, the implantation of the embryos into the uterus a few days later. The process begins with the activation of several mature eggs and ends with the birth of a healthy baby.

# To identify the common causes of infertility in both male and female and provide basic management and treatment

It is significant to be aware that MFSTC have specific attention and treatment for this infertility program. Male infertility is most frequently caused by issues producing healthy sperm. Sperm could be immature, have an odd form, or not be able to swim. Occasionally, you might not have enough sperm. Drug usage and smoking are some other factors that contribute to male infertility. Inherited disorders. Hormone therapy to boost sperm counts is one possible course of action. Maintain a healthy weight, quit smoking, cut back on alcohol use, and refrain from using any recreational drugs. Infertility is the inability to become pregnant despite trying for at least a year (or 6 months if the woman is over age 35). Infertility is also referred as when a woman continues to experience miscarriages. Infertility can take one of two forms: Fertility medications and hormones to stimulate ovulation or raise hormone levels are used to treat infertility in females. Treatment options for infertility include IUI, IVF, and GIFT.

#### To provide moral support through

For moral support, patients require their families, doctors, and other patients for both mental and physical assistance. The mental health of their patients is one of the primary concerns of medical professionals. When the patient receives moral support, they will experience an improvement in their emotional well-being. In addition to this, it promotes the development of healthy behaviors as a method of protecting against a wide range of diseases that are not transmitted from person to person. When someone or something is supported by other people without expecting anything in return other than the psychological and/or emotional benefits that come with offering moral support, this may be considered moral support for the person, the cause, or the side in a disagreement that is being supported.

#### Intra uterine inseminator

A method of artificial insemination used to treat infertility is intrauterine insemination (IUI). At around the same moment as your ovary produces one or more eggs that are ready to be fertilized, washed and concentrated sperm are inserted directly into your uterus. This helps ensure that the eggs are fertilized successfully. The procedure known as in vitro fertilization looks like this. When the cervix and uterus of a female are utilized for anything other than sexual activity or in vivo fertilization with the intention of achieving pregnancy, this term is used to describe those organs. Intrauterine insemination, also known as IUI, is the process of injecting washed, concentrated sperm directly into the uterus at the time(s) when the ovary releases mature egg(s) to be fertilized, which ultimately results in a pregnancy. The term "IUI" is an abbreviation for "intrauterine insemination," which is the full name of the procedure. This technique maintains a startling degree of similarity to more traditional approaches to the process of creation, yet producing satisfyingly high success rates.

#### Ovulation induction by hormone

Human chorionic gonadotropin, more often referred to as HCG, is a hormone that is produced by the body on its own spontaneously. In the latter stages of egg development, it performs an essential function and urges the ovaries to release the mature eggs (ovulation). In certain women, ovulation may be prompted by the use of hormones in the form of pills or injections. The body's own natural production of the hormone known as human chorionic gonadotropin, or HCG, is necessary for pregnancy. It is involved in the last step of egg development and stimulates the ovaries to release the mature eggs after it has done its job (ovulation). Injections of the hormone FSH are a potential treatment option for increasing the number of follicles that develop in the ovary and, as a result, the number of eggs that are ovulated throughout each cycle. This can be accomplished by increasing the number of follicles that are stimulated to grow by increasing the amount of FSH that is administered. When the follicles have grown to their maximum size, the patient may get an injection of a separate hormone known as HCG in order to stimulate ovulation and begin the process of becoming pregnant.

#### Investigations of couples are done by low costs

Despite the low cost, an infertility evaluation is a procedure that may be excessively costly and even painful. There is a potential that certain health insurance coverage may not cover the expense of fertility therapy. If this is the case, you should investigate your options. patients diagnosed as infertile should be offered ultrasonography, including TVC.

## E. Emergency Obstetric Care Service (EOCS)

#### Assure care to the new born baby

It's crucial to give parents and families realistic guidance on how to care for a newborn baby throughout the first few days. Every two to three hours, a newborn infant has to be fed. To safeguard the safety and warmth of the infant. To help babies in the early postpartum phase of transition, routine newborn care is crucial. Included in crucial infant care are: Immediate care at birth (delayed cord clamping, thorough drying, assessment of breathing, skin-to-skin contact, early initiation of breastfeeding) Thermal protection. While the majority of babies are delivered with just minor complications and require little to no assistance, a tiny minority do require some type of intervention.

#### Assure delivery service and ante natal mothers

Labor and delivery are both names that may be used to refer to the process of giving birth. It is of the highest significance to educate parents and families with knowledge that is both natural and practical on how to care for a newborn child during the first few days of the newborn's existence. This is done in order to guarantee the safety and comfort of the baby. Women should be encouraged to give birth as soon as possible, and their vital signs should be monitored throughout the whole of the labour and delivery process. A hospital's maternity ward often has a delivery room in addition to obstetric, neonatal, and anaesthesia care areas that are designed specifically for those purposes. Due to the fact that it is linked with the lowest risk, it has evolved to become the most popular and prevalent method of giving birth (in most cases). More than eighty percent of all fatalities that occur to mothers are the result of problems that arise during pregnancy or childbirth. Prenatal care refers to the help that expectant mothers get from qualified medical professionals during their pregnancies. It is also often known as care for women who are pregnant or referred to as maternity care. You should go to the doctor as soon as you have any cause to suspect that you could be pregnant, and ideally between the sixth and eighth week of your pregnancy.

#### **Assure Safe Delivery**

Without danger or complication safe deliveries are made by Mohammodpur Fertility Services. A parent or parents may safely and legally give up their infant, who is no older than three days old, in accordance with the Safe Delivery Act. Most midwives' patients are pregnant women and new mothers. Complications are assisted by physicians. No matter where a child is born, a safe pregnancy and delivery are critical to ensuring that they have the best possible start in life and the best chance to reach their full potential.

#### Assure medicine service

Ensure that medical service is available Because it uses brightly cultured boxes in the form of yellow, red, and blue for the simple administration of medication, the MFSTC's medicine programmer is successful in assisting less educated people in comprehending medicine. This is due to the fact that the boxes contain only the necessary information. The patient will have an easier time understanding the programmer as a result of this. The nurse's current administrative obligations that are related with medications will be minimized, and the pharmacist will take on the function of a consultant for the treatment of drug addiction instead.

#### Assure emergency treatment service

Ensure that there is access to emergency care Emergency Treatment Services (ETS) is a company that specializes in the diagnosis and treatment of mental disorders and emotional distress, and its name comes from the acronym for the company's full name. Patients who check themselves into ETS have the opportunity to get treatment at the facility, after which they may be discharged after obtaining prescriptions for any required drugs and recommendations to other mental health facilities. Women who find themselves in an unanticipated situation where they need to give birth or provide care for their babies have access to the emergency departments of the maternity hospital. Direct clinical treatment is provided to female patients at Women's Emergency Treatment who are having urgent gynecological and obstetrical complications. In addition, Women's Emergency Treatment provides urgent care for babies.

## F. Supporting Service

#### 24 Hours ambulance service

They provide ambulance service for patients who need emergency hospitalization and are able to transport patients to and from the hospital. They do this service on a consistent basis and with a high level of attention to detail. Free transportation in an ambulance is provided to pregnant women who are low-income so that they may give birth at the nearest hospital.

#### **Blood bank service**

They have a blood Bank. It provides blood in any kind of emergency and non-emergency situation. Before donated blood or blood products are used in transfusions, blood banking is the process that takes place in the lab to ensure their safety. In order to provide the safest blood transfusion policy and uphold quality in all areas, we are devoted to delivering service around the clock. Donate blood and save lives by signing up to be a blood donor.

## Central oxygen supply

Central oxygen system is available in Mohammodpur Fertility Services hospital. They have oxygen supply system for patients. This service is very essential for the treatment of the asthma patients. The three types of oxygen systems that are currently available are: Compressed gas systems. These systems use compressed gas to deliver oxygen to the body and remove carbon dioxide by directing air into and out of the lungs in a controlled manner. Portable oxygen concentrators (POCs) are liquid oxygen delivery systems. The oxygen source, vaporizer, decompression device, and alarm device are all parts of the medical oxygen supply system.

#### **Pharmacy**

A pharmacy is situated inside the territory of this hospital. Patients can buy any kind of medicine which is necessary for the treatment procedure from this pharmacy. The healthcare service known as hospital pharmacy includes the art, practice, and profession of selecting, preparing, storing, compounding, and dispensing medications and medical devices, as well as counseling patients, physicians, nurses, and other healthcare professionals on how to use them safely, effectively, and efficiently.

#### Social welfare department

The provision of high-quality care to clients and other members of society should be the primary focus of the social welfare system. To provide supplementary nutrition assistance programmes, such as those for family planning, nursing, and any other programmes that are appropriate. People and families that are struggling financially may get assistance from a social welfare system via programmes like food stamps, unemployment benefits, and financial assistance for medical treatment. The purpose of social welfare, which may be seen of as a kind of governmental support, is to provide for the fundamental requirements of individuals. It is important that children and other vulnerable populations get protection and care. Additionally, it is essential that the services that are provided to disadvantaged groups of people by state institutions and foster families be enhanced.

#### Pathology – General pathology and special lab for infertility service

General pathology for hormonal test results, impacts on fertility, cellular injury, inflammation, etc. General pathology is a vast and intricate branch of science that studies how tissues and cells are damaged as well as how the body reacts to and heals damage. Infertility tests are performed to help identify the causes of a woman's infertility and a man's infertility. Day 3 follicle stimulating hormone (FSH), luteinizing hormone (LH), estradiol (E2), AMH, prolactin, testosterone (T), progesterone (P4), 17-hydroxyprogesterone (17-OHP), thyroxin (T4), and thyroid stimulating hormone are some of the blood tests that may be required (TSH).

#### **Imaging – Ultrasonography (upper and lower TVC)**

The patient will learn that ultrasonography can be used on both sides of the region of concern if they have a blood clot in their arms or legs. Transvaginal ultrasound is a procedure that examines a woman's cervix, ovaries, tubes, and pelvic region. Across or through the vagina is what is meant by "transvaginal." Both B-mode and Doppler ultrasound are used in duplex imaging. Patients experiencing symptoms of deep venous thrombosis, such as upper- or lower-limb edema, discomfort, or soreness, may need a radiological test called duplex ultrasonography.

## **G.** Training Service and Department

## Field training of students from welfare department under and national university and different medical college and hospital

Instructional opportunities in the field for students who are enrolled in the Welfare Department of a National University or in any one of the several Medical Colleges and Hospitals Education and training in the basic ideas and practices that underlie the area of social welfare are essential for social workers, regardless of whether they are paid or unpaid. This is universally accepted as the case. Receiving the appropriate training is very vital in the field of child welfare in order to build a workforce that is well trained. The major goal of the Social Welfare Training Institute (SWTI), as stated in its mission statement, is "to offer the workforce of the Social Welfare Department with high-quality training services in an appropriate learning environment."

#### Training on counseling of field worker of health & family planning

They provide the students with the possibility to enroll in training programs. Family planning section works for all clients and indoor outdoor patients. Family planning refers to a couple's decision and planning over the timing and number of children they wish to have. The outcomes for maternal, neonatal, and child health are impacted by family planning approaches because they help prevent unintended pregnancies and deaths that may have been prevented owing to having too many children. This training gives an overview of the fundamental knowledge pertinent to FP programs and services, such as the justification for voluntary FP, factors to consider when choosing a contraceptive method, available contraceptive methods (including short-acting, long-acting, and permanent methods), and FP for clients with special needs.

#### Training on hysteroscopy operation

Hysteroscopic surgery is crucial for treating a variety of gynecological conditions. Both AHS and straightforward hysteroscopic surgery require particular skills. Hysteroscopic treatments are routinely used in gynecologic surgery at different teaching hospitals across the world. However, the opportunities for complicated hysteroscopic operations to be practiced vary greatly between gynecologic training programs.

## Six months midwifery

Complete a course in midwifery that lasts for duration of six months It is more likely for a woman to pass away during her pregnancy or birth if there are little resources accessible; this will help cut down on the amount of women who pass away unnecessarily throughout these stages of their life. Within the framework that they developed for nursing education, they included a course in midwifery as an essential part of the curriculum. A programme in midwifery that lasts for six months and requires registration in order to attend the

training facility; after successfully completing the programme, a certificate is presented to the student. The clinical practise with actual pregnant women, newborns, and families, in addition to the classroom teaching, are the two components that together make up the midwifery training programme that is made available right here at MFSTC. This programme is available to anyone who is interested in becoming a certified midwife. Due to the fact that this is the case

#### Six months of EOC

In a socialism program, health care is provided for everyone's well-being in a safe atmosphere that is directed to every six months in all patient care areas. Any location where patients get care is referred to as the environment of care (EOC), which includes both inpatient and outpatient settings. The major goal of the EOC is to offer a secure, practical, and efficient environment for clients, employees, and others. Inpatient, outpatient, recovery, and workflows all benefit from environment of care rounds. The Atmosphere of Care's primary goal is to give our patients a secure environment.

#### Six months of CSBA

The CSBA is a female fieldworker who works in the community and has completed a sixmonth training program in maternal identification and midwifery skills. A center for fiscal and strategic evaluations, this. It is a moral majority that occurs in all Developing countries and is entirely preventable that more than 500,000 women die from pregnancy-related causes every year. It is a current health service that is offered to women during pregnancy and the delivery of new babies. This objective, which is part of the primary strategy for a better health result of the six-month midwifery program.

**Training in MR, PAC, IUD, NSV, Tubectomy, Implant, Counseling, and Infection Prevention-**This MR is Menstrual Regulation and PAC is Post-Abortion Care, Post-Acute Care, Intrauterine Contraceptive Device, a vasectomy without a scalpel The doctor will need to numb the scrotum skin before performing a no-scalpel vasectomy. The implant service program will provide short-term, regular-term, and long-term techniques for male and female tubectomy and sterilization. They are also given the option to employ any strategy for problem-solving in this entire process. They instruct them on how to handle and operate each item using a projector, showing them in practice how it affects both men's and women's health. A permanent method of contraception for women is tubectomy, commonly referred to as tubal sterilization.

# Training of doctors and paramedics on clinical contraception, (RTI), (HIV-AIDS) case management and reproductive health, (MCH) health and nutrition

The use of drugs, devices, or surgery to prevent pregnancy is known as birth control, sometimes known as contraception. The complexity of birth control and its therapeutic significance are taken into account in clinical contraception. The RTI and HIV signify Respiratory tract infections and mother and child health services to provide well-being guidance, care, and treatment for all maternal issues, and regular follow-up counseling all clients about problem-solving and some cases of infections they give them to teach them how to live safely and how to stop their pregnancies and birth control skills, how to use some protection to avoid the HIV disease, how to stop their own habit of sexual addiction, how to take some methods of controlling birth issue, newborn baby living life, maternity mothers safety and more.

## H. Training unit

Modern conference room with highest facilities of (75 seats) capacity: The mother and kid at the fertility facility have a special system in place where they may meet with all the physicians, nutritionists, and nurses to discuss any new issues and work together on projects. They offer telemedicine, a large patient space, etc.

One cafeteria (Accommodation 60): They have a cafeteria that offers wholesome cuisine at an affordable price.

Six training rooms with digital and modern facilities (multimedia, air conditioner, sound system): For training classes, they have six rooms with digital projector monitoring and sound systems that can accommodate 60 people. Air conditioning in doctor and nutritionist rooms.

## I. Research Department

# On different aspects reproductive health, maternal & child health, nutritional status, and contraceptive use:

All facets of human reproduction are covered by Reproductive Health's publications. The ability to reproduce and the freedom to do so are all indications of a person's ability to have a fulfilling and safe sexual life. Care for mothers (those who are capable of carrying children) and children is known as maternal and child health (MCH) cares. Nutrition for pregnant women and new mothers promotes growth and increased economic prosperity. There is a link between maternal and neonatal health. Nutritional condition is strongly correlated with a child's gender, birth order, and immunization history. Contraception reduces health risks associated with pregnancy for women, particularly for adolescent girls.

#### Operational research and survey:

Organizational management can benefit from using operations research (OR), an analytical approach to problem-solving and decision-making. In operations research, issues are dissected into their component parts, which are subsequently resolved in predetermined steps using mathematical analysis. This is an analytical approach to managing problems and making decisions. They conduct study on infertility issues, mother and child issues, and some other problems.

# Clinical trial on different contraceptives before being introduced in family planning program:

They test out several medically prescribed contraceptives before being introduced to the family planning program.

## J. Trainee's hostel and meeting facilities

#### Hostel for 6 months trainees (CSBA, Midwifery, EOC):

Students attending training sessions are provided with some accommodations. A place where visitors can stay where they can rent a bed, typically a bunk bed in a dorm. A sixmonth basic midwifery training course was offered to the local community under the CSBA program. A two-week course is offered at the Maternal and Child Health for the training of trainers program. A MFSTC-approved educational institution is where midwives receive their training, with half of the curriculum based on clinical practice with direct contact with mothers, infants, and families. Hospital managers' managerial

competences, knowledge, and skills were somewhat improved by the training programs under study.

#### A well decorated conference room with a seating arrangement of 65 person:

A well-decorated conference room is necessary for meetings because collaborative and discussion topics merit a shared environment. Explore & learn about incredible furniture, media displays, and accessory ideas for the Modern Conference Room. You must furnish and decorate the conference room so that everyone will find it useful. To produce a balanced recipe. Great discussions can be facilitated in a well-designed conference room.

#### Fully finished 37 rooms are available including 8 VIP cabins with all modern things:

For some visitors, MFSTC has 8 VIP cabins where they can rest and stay.MFSTC has well decorative VIP cabins.

#### 2.7 Objective of the department:

- 1. Menstrual regulation, pregnancy advice, and methods to lower the risk of complications from an incomplete abortion are all covered in counseling.
- 2. Provide family planning and contraception options for both short and long term use.
- 3. Support Patients who have been dealing with infertility have also been given access to particular services for that condition.
- 4. Offer all-inclusive services with an emphasis on the welfare of mothers and children. Reduce the rate of infant and maternal mortality by encouraging clients
- 5. Nutritional counseling of children, adolescents, and pregnant mothers and give breastfeeding counseling to lactating mothers.
- 6. Expectant moms who are pregnant receive prenatal (care before delivery) and postpartum (care after birth) healthcare.

#### **CHAPTER - THREE**

## Nutrition counseling of child and breastfeeding practice of lactating Mother

#### 3.1 Nutrition counseling of child

The biochemical and physiological process by which an organism uses food to sustain its life is known as nutrition. It supplies nutrients to living things, which they can then digest to produce energy and chemical structures. The study of nutrition focuses on the vital elements required to promote human health, as well as how food and drink affect our bodies. Children have a responsibility to themselves to ensure that they are getting all of the required nutrients as they grow and develop so that they can keep their strength and health. Young children, who have higher basal metabolic rates than adults, have a larger requirement than adults have for enough nutrition to support their growing bodies. Because they need greater quantities of energy, children often consume more calories than adults do. This is because children tend to eat more. Maintaining constant energy levels is one of the potential advantages that may result from adopting a healthier diet. Teeth and bones that is quite robust in their construction. Consuming food that is high in nutrients is vital for children and adolescents, not only to guarantee correct growth and development but also to lower the risk of a broad range of different health issues. There are three stages of childhood: early childhood, middle childhood, and late childhood. Together, they make up the whole childhood period (preadolescence) there are three stages of childhood: early childhood, middle childhood, and late childhood (preadolescence). Different child age groups are:

Age group	Age
Newborn	(0 day –4 weeks)
Post Natal	(first 6-8 week)
Infant	(1 month–1 year)
Toddlers	(1 year-2 years)
Preschoolers	(3 year -5 years)
Child	(5 year -12 years)
Middle Childhood	(6 years-8 years)
School-aged child	(6 year–12 years)
Young Teens	(12 year-14 years)
Adolescent	(12 year–18 years)

#### 3.2 Important Factors For The Infant Include:

Breastmilk is quickly absorbed and provides the proper amount of nutrients as it adjusts to an infant's changing demands. Increased cognitive development and potential protection from respiratory tract infections, acute otitis media, and gastrointestinal infections are two benefits of breastfeeding. Breastfeeding has been linked to a reduction in sudden infant death syndrome and may protect against obesity in adulthood (SIDS).

<u>Age</u>	<u>Nutrition counseling</u>
0-6 month	EBF (Exclusive Breastfeeding)
6-1 year	Family Food Advise
1-3year	Nutrition Advise

#### 3.3 Materials and methods

At first patients visit ANC for taken their new history with all the data of patient treatment and check their all information.

- Determine the baby's body weight by measuring and verifying their weight.
- Giving them counselling for all of their concerns (including asking about their personal problems in order to determine their birth scenario); (Weight, the state of the breastfed infant,)
- Advice for infants between the ages of 0 and 6 months They need information just pertaining to nursing.
- For babies aged six months to one year, family members are encouraged to provide dietary guidance and to maintain nursing until the age of two.
- Advice on healthy eating is provided for children aged 1 year to 4 years.
- Up to four adolescents, all nutrient-dense foods as well as advice on maintaining a regular adequate meal intake are provided.
- Advise teenage females on how to maintain a healthy physical condition and provide dietary recommendations that are appropriate for the teen years.
- The statistics on the baby's weight were recorded and examined.
- There are many distinct categories of children, adolescents, and adults, each of which requires its own unique weight scale.

## 3.4 Weight Measurement Technique At MFSTC -

The weight of a person is a criterion for determining their nutritional status. The weight can be recorded. Firstly a baby is lain down on the digital weight scale then record the weight and comparison with old weight.

- Digital weight Measurement machine for baby
- Weighing scales with electricity
- A beam-style weighing scale,



Source: website- weight measurement technique



#### 3.5 Nutritional Needs and Patterns

From the age range of six months to five years, the perfect nourishment for children. Nutrition counseling of child in different ages:

#### A. 0-6 months (Brestfeeding Period)

- A. Babies who get enough breast milk get all the nutrients they need from breast milk. And if a mother cannot give milk to the baby, then in that case formula milk should be given.
- B. At this time, the baby should be exposed to the sun only for vitamin D. Morning sunshine fulfills the vitamin D needs of children.

C. mother's breast milk is enough for this 6 month baby. Besides, no food can be given to him.

#### B. 6 months to 12 months (Family food period)

Complementary feeding from 6 months: After six months, a baby's energy and nutrient requirements start to outpace those of breast milk, necessitating the use of supplemental feeding to close the energy and nutrient gap.

- A. A newborn child should start receiving breast milk as soon as possible after birth. It should start an hour after the baby is born. It is the ideal method for ensuring that the youngster receives a proper diet.
- B. Breastfeeding is advantageous because it gives baby nutrition and boosts his or her immune system.
- C. Breastfeeding alone is suggested from birth to six months of age. Even when a child is sick, it is a vital source of sustenance for them.
- D. Solid food can be introduced to a baby's diet after they reach the age of six months.
- E. Breastfeeding can continue while being complemented by other foods.
- F. Fruit juices are typically introduced into the diet initially.

## **Complementary feeding**



#### C. 1 year to 3 year's (Nutrition advise)

- A. Children of this age can recognize when they are satisfied after eating. It is important to pay attention to their cries for food and to stop overfeeding kids.
- B. Because children in this age group need to consume a variety of nutrients, parents should concentrate on offering a wide range of foods to meet their children's dietary needs.
- C. Children of this age need foods high in fat, and dairy products should be provided to meet their calcium needs.
- D. Children this age shouldn't be given processed foods. The ideal level of calorie monitoring should be used.
- E. It's important to continue feeding children at regular intervals because they are engaging in activities like walking, running about, and playing at this age.

#### D. 3 years to 5 years

- A. A well-balanced, nutrient-rich diet is necessary for children in this age group.
- B. Since fruits are a significant source of many vitamins, it is advisable to increase fruit consumption. Juices should never be chosen over fresh fruit for developing children.
- C. Meat, poultry, lentils, beans, and nuts are all sources of protein in meals. These foods not only give the body protein but also iron, zinc, and minerals.

#### E. Middle childhood (ages 5–9 Years): a time of transition

The main problem of middle childhood baby is missing breakfast tendency. The school environment is totally new and they are try to cope with it. So they are very conscious about their breakfast.

- 1. Children of school age should eat a range of fresh foods from the five dietary groups, including: All five of the healthy dietary groups should be consumed by school-age children Vegetables, fruit, grains, dairy, and protein
- 2. Nutrients that are essential for learning, development, and growth can be found in healthy diets.
- 3. Limit your intake of foods high in sugar, fat, and salt, as well as low-fiber foods and beverages.
- 4. Child needs three meals per day.

## F. Adolescent period and nutrition counseling (growing healthy and eating healthy)

At any age, eating healthfully is crucial, but teenagers need to pay particular attention to this.

- 1. Must avoid snacks/packaged food or beverages
- 2. Vitamins and minerals included in fruit and vegetables to support a healthy immune system.
- 3. The best sources of iron and protein are meat, poultry, fish, eggs, nuts, and legumes. They are very important components of adolescent period.
- 4. Dairy is the most crucial term for adolescents. Dairy products including milk, cheese, and yoghurt support healthy heart, muscles, and nerves as well as the development of bones and teeth.

# 3.6 There are some foods that should avoid feeding a baby under 6 months:

- **A**. Give honey to infants after their first birthday. Botulism in infants may be brought on by germs found in honey.
- **B**. Steer clear of cow's milk before the age of one because infants cannot digest it and it is deficient in all the nutrients that babies require.
- C. Consuming unpasteurized beverages or foods, such as juices, milks, yogurt, or cheeses, may put your child at risk for contracting an E. coli infection. Extreme diarrhea can be brought on by the dangerous bacteria E coli.
- **D**. Specific foods, such as entire nuts, popcorn, hard candies, and grapes that might cause choking (unless they are cut into small pieces). Before the age of three, avoid giving your child these foods. Juice for infants shouldn't be consumed before to age because it is high in sugar.
- E. All types of packet foods like chips, biscuits, cake, cold drink etc must be avoided
- **F**. Suji, khichuri,mixed riced,boiled egg must avoid for under 6 month baby.
- **G**. Any kinds of medicine is avoid to giving child.

#### 3.7 The Levels Of Care

- **1. Low dependency care:** For babies who don't need to remain in this part continuously but are healthy and growing, they give them careful attention during monitoring.
- **2. Intensive care:** The newborns who qualify as premature are those who are born more than three months early, with low birth weights (less than 1500 grams), or who have inherited illnesses.
- **3. Transitional care:** The maternity department at MFSTC Hospital is where this transitional care is located. Babies who require medical care and are well enough to get basic care at their mother's bedside are given.
- **4. High dependency care:** High dependency care is crucial for newborns with less serious illnesses, but certain babies require extra attention, assistance, and a lot of surveillance while they recover from life-threatening conditions in the neonatal unit.
- **5. Kangaroo mother care:** Baby care provided by the kangaroo mother involves skin-to-skin contact. Treatment and care are provided for low birth weight infants. With parents, especially with women, the newborn is cared for skin-to-skin and chest-to-chest. This kangaroo mother care boosts parental self-esteem, encourages attention to bonding, and boosts milk production. They give this care for at least an hour each time, and if they can, they will let it linger on their mother's chest for one to two hours..
- **6. Breast feeding care:** For a newborn baby, this is a crucial milestone. Some women experience breast issues that cause their nipples to crack, start bleeding, and cause issues with their babies' ability to consume their milk. And this is a crucial and necessary nourishment for a baby. They take extra precautions and educate mothers on proper eating and latching techniques as a result.

#### 3.8 Breastfeeding Counseling Of Lactating Mother

#### **Breastmilk**

Breast milk, often known as mother's milk, is generated by mammary glands that are found in a female human's breast. The main source of nutrition for babies is breast milk, which contains a variety of minerals and vitamins as well as fat, protein, and carbohydrates. Six months after birth, a newborn baby's sole vital diet is breast milk. It's critical for both mother and baby. Breast milk can be consumed by a newborn for two years. The infant is not permitted to consume any other bottle milk or anything else for the first six months. The consumption of milk in a bottle is extremely dangerous to infants. Baby may experience digestive issues, gastric issues, or other issues as a result of this food. Because newborn babies can't digest bottle milk, they get sick. There are numerous easy activities you can do to protect your infant against digestive issues, motion sickness, vomiting, etc. For infants aged 6 to 23 months, breast milk is a crucial source of nutrition and energy. Between the ages of 6 and 12 months, it can meet up to half of a child's energy requirements.

#### **Breast Feeding Counseling:**

Counseling for breastfeeding: Breastfeeding is the most natural way to eat for a baby, thus it's important that new mothers learn how to do it. During the first six months of a baby's existence, the infant gets all of the nutrition she needs from her mother. Colostrum, which is the portion of the mother's milk that the newborn takes during the first three days of breastfeeding, is richer in critical nutrients and helps the kid develop immunity. Colostrum is fed to the infant within an hour after delivery at the very latest. Colostrums are a sticky, yellowish liquid that have a mushy consistency. In order to reduce the number of infant deaths that are caused by infectious diseases, the World Health Organization (WHO) recommends that infants be breastfed exclusively during the first six months of their lives. There is a greater risk of death from diarrheal sickness among children who are only given formula via a bottle. After the first six months, mothers are recommended to begin adding nutritious foods to their infant's diet.

Mothers are encouraged to start supplementing the baby's diet after six months. Must be remember some things when counseling start:

- Make acceptable eye contact and smile.
- Using encouraging language, you conveyed pity and respect.
- Avoid being critical or using harsh language.
- Be sure to listen intently and to ask open-ended questions.
- Increase mother's knowledge so she can solve issues.
- Don't rush anything. Spend time getting counseling.
- Don't be in such a rush. Spend some time in counseling.

#### **3.9 Good Positioning For Breastfeed:**

Mother and baby connection is facilitated by a comfortable position. Baby benefits from receiving adequate milk from the mother. Below are a few relaxed positions:

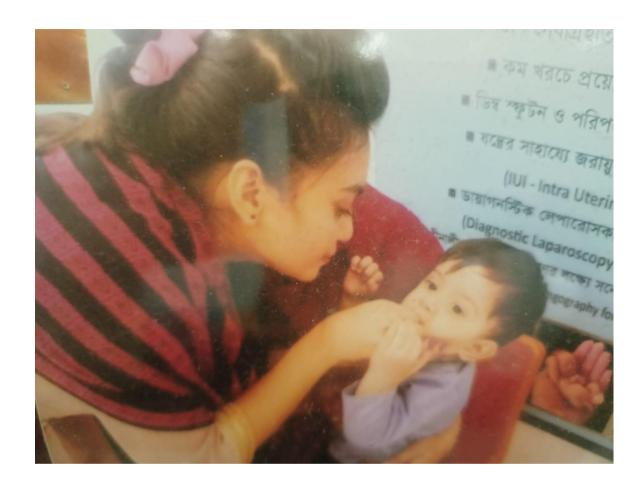
- 1. Mother should sit comfortably with her back supported by a pillow,
- 2. Eliminate any barriers, and establish a skin-to-skin connection with the infant.
- 3. Baby's head should not be held by the mother; instead, she should grasp the baby's neck and shoulders in her hand.
- 4. Bring the baby up to the mother's breast.
- 5. Babies can receive enough breast milk at night because prolactin hormone production is increased at night.



Source: website- NRU

## 3.10 There are various forms of breastfeeding and supplemental feeding

- Exclusive Breastfeeding
- Complementary feeding
- Artificial feeding
- Bottle feeding



#### 3.11 Exclusive breastfeeding for 6 months

Exclusive nursing means that the infant only consumes breast milk and nothing else, not even water. EBF means that a baby only consumes breast milk from his or her mother, a wet nurse, or expressed breast milk; no other liquids or solids, not even water, are given to the baby. Instead, oral rehydration solution, drops, or syrups containing vitamins, minerals, and medications are given instead (WHO, 200)

The three distinct stages of breast milk are colostrum, transitional milk, and mature milk.

#### Colostrum

The colostrum is the beginning of breast milk. It happens during pregnancy and persists for a few days following the baby's birth. It is either creamy or yellowish in color. Additionally, it is far thicker than the milk produced later in breastfeeding. Protein, fat-soluble vitamins, minerals, and immunoglobulins are all abundant in colostrum. Antibodies called immunoglobulins are transferred from the mother to the fetus and give the infant passive immunity. The infant is shielded from a wide range of bacterial and viral diseases through passive immunity. Transitional milk will take the place of colostrum two to four days following delivery.

#### Transitional milk

After colostrum, there is transitional milk, which lasts for about two weeks. Lactose, fat, and water-soluble vitamins are all present in significant concentrations in transitional milk. More calories are in it than in colostrum.

#### Mature milk

The last milk produced is mature milk. It is essential to keep your baby hydrated because 90% of it is water. Carbohydrates, proteins, and lipids, which are required for both development and energy, make up the remaining 10% of the diet. Mature milk comes in two varieties:

**Fore-milk:** This form of milk is discovered at the start of the feeding and contains water, vitamins, and protein.

**Hind-milk:** This form of milk is known as hind-milk, and it appears after the first milk discharge. It has higher fat content and is essential for weight gain.



# The best technique to determine whether or not there is enough milk for baby-

- Each month, the infant gains 500 gm
- Urinate, at least six times every day
- Minimum 8 or more feedings each day

## 3.12 Breastfeeding benefits for baby

- 1. Breast milk is the best source of nutrients for newborns
- 2. Breast milk includes significant antibodies.
- 3. Breastfeeding may lower the risk of disease.
- 4. Breast milk helps a baby maintain a healthy weight
- 5. Breastfeeding may increase a child's intelligence
- 6. reduces neonatal and newborn deaths
- 7. Neonatal abrupt deaths and lethal necrotizing enterocolitis (intestinal disease)
- 8. Breast milk enhances cognitive function
- 9. A healthier weight

#### **CHAPTER - FOUR**

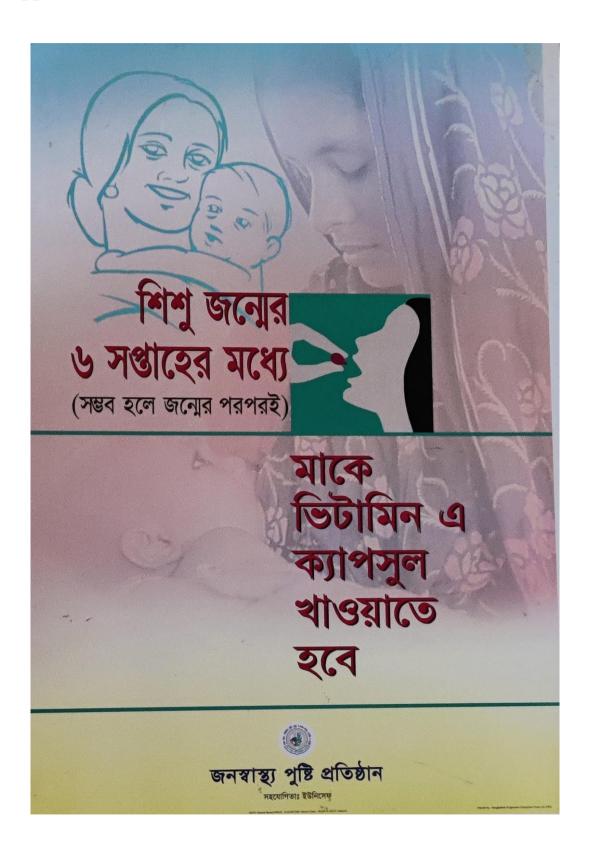
#### **CONCLUSIONS**

#### 4.1 Conclusion

The MFSTC hospital in Bangladesh is a famous institution. It enabled me to investigate a wide range of subjects and gave me insightful information for my research. During my internship, I learnt how to employ counseling to determine the underlying reason of a patient's ailment.

The majority of people in Bangladesh do not have any form of formal education. They do not have the necessary knowledge regarding the nutrition of children. The vast majority of them are affected by malnutrition. The vast majority of moms are unable to nurse their children in the correct posture. The majority of the children have problems with their nutrition. They are reliant on some type of medication. Through my participation in this internship, I have gained knowledge and been inspired to pursue a career as a child nutrition counsellor as well as a breastfeeding counsellor for lactating mothers. This internship went on for a while. My hands-on experience when I observed the MFSTC hospital's practise of continuity of child nutrition and breastfeeding counseling, I learned lots of things fro this hospital that I was previously unaware of.

## **Appendix**











# The End