"ASSESS KNOWLEDGE REGARDING BREAST MILK BANKING AMONG **POSTNATAL MOTHERS**"

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ABSTRACT

Introduction: Breast milk is the very important thing for a newborn and it is containing all primary nutrients. The first milk bank in Asia under the name of Sneha established by Dr. Armeda Fernandez was started in Dharavi, Mumbai in Sion Hospital on 27th November, 1989.

According to Human milk banking guideline 2014 A human milk bank, breast milk bank or lactarium is a service that collects, screens, processes, pasteurizes, and dispenses by prescription milk donated by nursing mothers who are not able to biologically related to the recipient infant.

The government of India in 2018 has acknowledged the role that human milk banking can play in reducing neonatal mortality and morbidity, and launched the "National Guidelines on Lactation Management Centres in Public Health Facilities" with a vision to make breast milk universally available for all infants. ^[13] WHO plans to develop guidelines on donor human milk banking during 2022-2023.

Objectives:

- To assess the knowledge regarding Breast milk banking among postnatal mothers.
- To assess the association between demographic variable and knowledge regarding breast milk banking among postnatal mothers.

Methods:

A non - experimental design was employed, 200 postnatal mothers with 0-6-month age of baby in community area. The self - structured questionnaire was used data collection.

Results:

The result was that majority of postnatal mothers who were having 0-6-month age old baby had inadequate knowledge (42.5%), whereas postnatal mothers had moderate knowledge regarding breast milk banking (42.5%) and postnatal mothers had adequate knowledge (15.0%) regarding breast milk banking.

Conclusion: In conclusion drawn, implication, limitation, recommendation. The focus of this study was to assess knowledge regarding breast milk banking among postnatal mothers. The findings revealed that knowledge majority of postnatal mothers who were having 0–6-month age old baby had inadequate knowledge (42.5%), whereas postnatal mothers had moderate knowledge regarding breast milk banking (42.5%) and postnatal mothers had adequate knowledge (15.0%) regarding breast milk banking.

Keywords

Human milk, Human milk bank, Knowledge, Assess, Postnatal mothers.

CHAPTER - I INTRODUCTION

"Human milk is not just a food; it also compliments the immaturity of organ in infants" - Peter Hartman Background of the study

Breast milk is the very important thing for a newborn and it is containing all primary nutrients. Breast milk is best source for nutrition for all newborn babies.^[1]

The breast milk is first food in life which ensures that infants and children's get a healthy and nutritious life.^[2]

Breast milk gets easily digestible by the newborn's intestine, offers a variety of immunologic properties, effective in protecting the baby from respiratory tract infection gastrointestinal infections and allergies. It has bacteriostatic functions against bacteria and acts as a laxative agent in neonates.^[3]

According to WHO In the first two years of life, breast milk provides optimum nutrition fosters healthy growth and improves cognitive development and developing non- communicable diseases later in life^[4]. Breast milk provides passive immunity to the infants. The aim of breast milk is to provides breast milk to preterm infants where the mother is unable to feed, and benefit of human donor breast milk when the mothers own milk is inadequate. The benefits of breast milk for healthy term newborn have been extensively reviewed. Human milk gives a solution to the mothers that cannot supply their own breast milk to their child for reason such as baby being at risk of getting diseases and infections from a mother with certain diseases. [5]

According to WHO and UNICEF 2018 Breastfeeding is vital to a child"s lifelong health, and reduces costs for health facilities, families, and governments. Breastfeeding within the first hour of birth protects newborn babies from infections and saves lives. Infants are at greater risk of death due to diarrhea and other infections when they are only partially breastfed or not breastfed at all-^[6]

According to UNICEF 2018 breastfeeding is not just good for babies, it is good for mothers well. Indeed, breastfeeding has been shown to protect against post-partum hemorrhage, postpartum depression, ovarian and breast cancer, heart disease and type 2 diabetes mallitus.^[7]

World Health Organization recommends 2021 that all mothers should initiate breastfeeding after birth as soon as possible most probably within the first hour after delivery. WHO recommends exclusive breastfeeding during the first 6 months and continuing it for 2 years or beyond complemented with a variety of adequate nutrient foods after six months of life. [8]

Breastfeeding has a pertinent and important role to play in improving the status of neonatal health in India.

This emphasizes the need to universalize access to human milk as an integral component in the country's health-care system, especially in all newborn units that provide care to sick infants^[9]

and UNICEF 2023 Global Breastfeeding Collective to rally WHO According to political, legal, financial, and public support for breastfeeding. This integration brings together implementers donors from governments, philanthropies, international and organizations, and civil society.^[10]

The government of India in 2018 has acknowledged the role that human milk banking can play in reducing neonatal mortality and morbidity, and launched the "National Guidelines

on Lactation Management Centers in Public Health Facilities" with a vision to make breast milk universally available for all infants. [13] WHO plans to develop guidelines on donor human milk banking during 2022-2023^[3]

According to Human milk banking guideline 2014 A human milk bank, breast milk bank or lactarium is a service that collects, screens, processes, pasteurizes, and dispenses by prescription milk donated by nursing mothers who are not able to biologically related to the recipient infant. [3]

The first milk bank in Asia under the name of "Sneha", established by Dr. Armeda Fernandez was started in Dharavi, Mumbai in Sion Hospital on 27th November, 1989^[11]

Sion hospital sees nearly deliveries a year of these, nearly 12% to 14% were preterm babies. there were also babies separate from their mothers due to some specific reason and cannot breastfeed. The milk is sufficient to provide to them for growth and development of babies. But there were so many babies are need at the other hospital, believe that more awareness is required to add more donors to supply chain. Dr. Swati Markar, who heads the neonatology department at the hospital, said awareness of the importance of breastfeeding is still lacking of knowledge. [3]

Currently, the number of human milk banks has grown to nearly 14 all over India but the growth of human milk banks has been very slow as compared to the growth of neonatal intensive care units.[12]

Infant and Young Child Feeding chapter of Indian Academy of Paediatrics and Human Milk Banking Association together formed Infant and Young child Feeding and Human milk Banking Guidelines 2015. [10]

In September 2013, "Yashoda" Human Milk Bank was established in D. Y. Patil Medical College, Hospital and Research Centre, Pimpri, Pune in Maharashtra. Established

with the partnership of Rotary Club of Nariman Point, Mumbai, it is the first human milk bank established in a private medical college in India.[13]

An advanced human milk bank and Comprehensive Lactation Management, Training and Research Centre (CLMTRC) were established on 31 January 2019^[14]

In march 2021 WHO recommends on the infants feeding context of covid -19 up hold the standing recommendations for breast feeding, non-separation, and skin to skin contact, including the use of donor human milk when the mother"s own milk was not available. [15]

In covid 19 management guidelines in seven countries in southeast Asia were not aligned with WHO recommendation describe the lack of transmission through the breast milk or breast feeding. The use of safe donor human milk bank accessed through the human milk banks.[16]

In the study, the descriptive study to assess the knowledge of nursing officers regarding the human milk banking and to identify the factors associated with the level of knowledge. The researcher selected the sample 206 nursing officers as a sample, the researcher selected the through structured questionnaire. The researcher selected the descriptive and statistics method. The study result presented that maximum age group between 31 — 40 year 63.6%, where 57.8% had adequate knowledge regarding breast milk banking knowledge of nursing officers was significantly associated with working department. The study concluded that knowledge of nursing officer regarding importance of human milk banking was satisfactory.[17]

In the study, cross- sectional study on knowledge, attitude and awareness regarding donor breast milk banking in south Africa. The researcher selected the 163 mothers as sample through quantitative data from open ended questions, the data calculated by using the t — test and logistic regression to determine differences in variable and to understand association related to knowledge. The result showed that 49.7% of mothers had post high school qualification, 82.8% were unemployed and 87.0% received social security, in 163 mothers 64.4% had adequate knowledge of donor breast milk. The study was concluded that lack of awareness concerning donor milk banking was associated with poor knowledge of Donor milk banking, which may drive poor uptake of this critical nutritional source for at-risk neonates. [18] In the study, descriptive study on assessment of knowledge regarding human milk banking among mothers at Chandigarh. The researcher selected 60 mothers as sample by using self — instructional questionnaire through purposive sampling technique. Study result showed that level of knowledge among mother was found to be that 48% had average knowledge, 40% had poor knowledge & only 12% had good knowledge. The relationship between socio-demographic variables and knowledge of mothers showed that the mother's educational status was statistically significant. The study concluded that majority of mothers have poor to average knowledge whereas only few had good knowledge regarding Human milk banking^[19] In the study, descriptive study on knowledge and attitude regarding human milk banking among postnatal

mothers in selected hospital of Una Himanchal Pradesh. The researcher selected 100 postnatal mothers as sample through non probability purposive by using structured questionnaire. The study result was showed that the major finding showed that the majority of 48(48%) having poor knowledge regarding human milk banking, 35(35%) postnatal mothers having average knowledge on human milk banking and 17 (17%) of postnatal mothers having poor knowledge on human milk

banking. The researcher concluded that majority of the postnatal mothers had poor knowledge and attitude towards human milk banking. [3]

In the study, Prospective study on knowledge of breast feeding and human milk banks among mothers Chris Hani Baragwanath Academic Hospital South Africa. The researcher selected total 64 mothers as sample size through non probability convenient sampling technique by using questionnaire. The study result showed that majority of women respondents 66% were HIV negative, some have identified breast milk as superior (97%), although some have knowledge on specific benefits was limited, less than half (45%) about most of the 67% had np prior knowledge regarding human milk banking, 80% were willing to donate their own milk to a milk banks, 58%were comfortable using milk from a bank for their Children"s. The study concluded that the cost, medical, developmental emotional, and social benefits of exclusive breastfeeding for the mother and child firmly established. [20]

Need of the Study

Given a choice each and every baby prefer breast milk because that is what is the healthiest

Breast milk thought to be best form of nutrition for neonates and infants who are unable to breastfeed are banked human milk or commercially available formula.[21]

The objective of breast milk banks is to ensure and enhance the supply to that every baby born or admitted to the hospital receives mother"s milk, to avoid bottle, animal and formula feeding. To give support to breast feeding practices and to promote baby friendly hospital care. [3]

Breast milk donation is recommended as first alternative when it is not possible for the mother to breastfeed their hospitalized babies or if their mother do not have sufficient milk production and any other condition where mothers may not be able to feed their babies. [22]

According to the World Health Organization and United Nations children's fund in 1980 was started that if the baby does not get their own milk they cannot grow properly, the mother milk is the best food for that baby is human milk from another lactating mother Donor milk has a broad range of therapeutic uses for the common reasons for prescribing donor milk are prematurity, allergies, feeding formula intolerance, immunologic deficiencies etc. [²³]

Breast milk is not recommended for mothers who having certain health problems. The absences of the infant's own mother milk, donor milk offers the benefits of human milk for the infant including optimal nutrition, easy digestibility and immunological protection against many organisms" human milk also contain growth factors that can protect immature tissue, promote maturation particularly in the gastrointestinal tract and protect healing of tissue damaged by infection^[3]

At the comprehensive lactation management center, new mothers were provided support to breastfeed their babies, to express milk and donate excess milk for other sick babies in the hospital. [3]

The Government of India acknowledged the role that human milk banking can play in reducing neonatal mortality and morbidity and held the first national consultative meeting

for formulating national guidelines on human milk banking in 2013-[8]

Mother milk bank says that this service provides mothers with an alternative to infant formula and allows the mother to give nutrition to their newborn it is needed for healthy growth. The International Milk Banking Initiative (IMBI), was founded at the International HMBANA Congress in 2005. It lists 33 countries with milk bank programs. [24]

The main function of milk banks is to as serve as repositories of donated milk so it is available when needed. Milk bank can receive the milk from donors, process it and store it until used. Most common milk from multiple donors is pooled, although some banks pool milk only for the individual donor. Usually, milk provide by milk banks firstly has undergone pasteurization^{. [25]}

P Karthika 2019 conducted on Pediatric staff nurses" knowledge regarding human milk banking working in Gordhan Das Patel children hospital. The data was collected from 30 pediatric nurses related to human milk banking by convenient sampling method with the use of structured questionnaire method. The study result was that pediatric 52% staff nurses had adequate knowledge regarding breast milk banking, moderate knowledge 39% and inadequate knowledge 9% regarding human milk banking. [26]

The Government of India highlighted the need for formulating operational guidelines with robust protocols and emphasis on implementation strategy, quality controls mechanism, monitoring and accreditation. The ministry of health and family welfare took initiative in 2014 and formed a group composed of human milk bank experts, neonatologist, regulatory official and quality and public health specialist to support these efforts. [8]

Government launched the "National guidelines on lactation management centres in public health facilities in July 2017.[8]

Nearly 85% of milk banks in India has established by non-government organizations, and only a handful had supported by the government. Within the last 2 years nearly 50% of milk banks have supported by the state governments. Rajasthan, one of the states with a neonatal mortality rate, has supported the setting up of 10 milk banks during the last year. The state government of Tamil Nadu has supported setting up 7 milk banks. The recurring cost of most milk banks is managed through hospital funds. [8]

The researcher has noticed that if the community people are not aware regarding breast milk banking. Researcher also believe that there is a proper and adequate knowledge regarding Human milk banking. Human breast milk bank, its procedure and benefits of the human milk there will be increased number of donors which is very suitable. That is why the researcher thinks that there are needs of the study that is researcher will know the knowledge of postnatal mothers regarding breast milk banking.

Aim of the study: To find out the knowledge regarding breast milk banking among postnatal mother who were having 0-6-month age of baby.

Statement of Problem

"Assess knowledge regarding breast milk banking among postnatal mothers"

Objectives:

- To assess the knowledge regarding Breast milk banking among postnatal mothers.
- To assess the association between demographic variable and knowledge regarding breast milk banking among postnatal mothers.

Hypothesis:

The hypothesis was tested at the 0.05 level of significance.

H0: There was no significance association between knowledge score with their selected sociodemographic variables.

H1: There was a significance association between knowledge scores with their selected sociodemographic variables.

Assumptions:

- In this study researcher assumes that postnatal mothers were not have knowledge regarding the Breast
- In this study researcher assumes that postnatal mothers were have knowledge regarding the Breast Milk Banking.

Operational Definitions:

Breast milk:

Breast milk is the indispensable source of nutrients for early human growth and development, supplying components that support infant growth and development.

Human milk bank:

In this study breast milk bank significantly refers that human milk bank, breast milk bank or lactarium is a service that collects, screens, processes, pasteurizes, and dispenses by prescription human milk donated by nursing mothers who are not able biologically related to the infant.

Knowledge:

In this study knowledge regarding breast milk banking of the postnatal mothers.

Assess:

Assess refers to knowledge regarding breast milk banking among postnatal mothers.

Delimitations:

- This study was limited to postnatal mothers who having 0–6-month age of children.
- Postnatal mothers present at the time of data collection.

CONCEPTUAL FRAMEWORK

The conceptual framework of present study is based on biologist Ludwig von Bertalanffy General system theory (1978).

This consist of components like –

- Input
- **Process**
- Output

Bertanlanffy s General Theory (1068) describes the set of interacting components of a boundary that filter the type and rate of exchange of energy, material and information with the environment^[26]

Input

According to General system theory input refers movement of matter, energy and information from environment into system.

In this study input is

(a) Demographic Data

Age, religion, type of family, education, occupation, no of children, Family income, type of family, residence, Earlier knowledge.

(b) Assessment of knowledge regarding breast milk banking by using self-structured questionnaire.

Process

Process refers to the process by which matter, energy and information are modified or transformed within the system. In the present study process refers to:

- Development of tool i.e. Structured Knowledge Questionnaire
- Assessment of knowledge regarding Breast milk banking

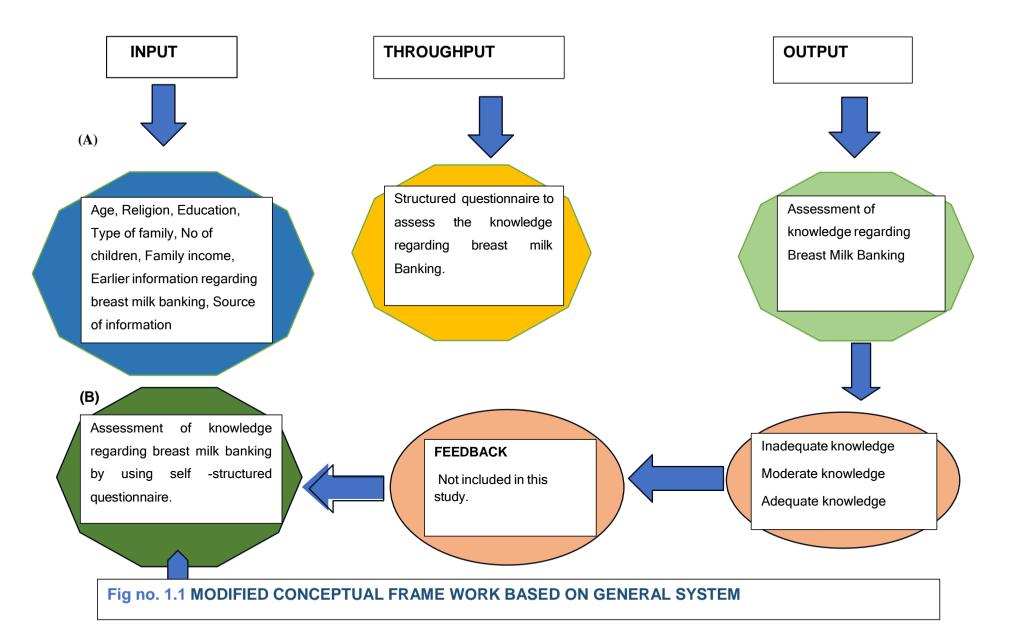
Output

Output in this model refers to matter, energy and information that are released from the system into environment. In this study output refers to:

- Assessment of knowledge regarding Breast Milk Banking
- Inadequate knowledge
- Moderate knowledge
- Adequate knowledge
- Knowledge regarding breast milk banking

Feedback: feedback allows the system to monitor internal functioning of, so it can increase or decrease the input or output and maintain the highest level of functioning

Feedback will be not included in the study.



CHAPTER-II REVIEW OF LITRATURE

"Literature should not be suppressed merely because it offends the moral code of the censor."
William O Douglas

Fred Kafui Tende, Adanna, UlkoakuNwameme (2023) conducted qualitative research on Acceptability of breast milk donor banking Ghana. The researcher selected 18 health, 11 midwives, 4 nurses, 2 nutritionist and a medical doctor as a sample size through in-depth interview. The data were analysed by using Version 13 of QSR NVivo used. The study result shows that there were five general nurses, two nutritionists, and one medical doctor. Two (2) men and sixteen (16) women who responded to the survey were the respondents. The responders" average age was close to (30) years. The study concluded that health professionals had little knowledge about the banking of breastmilk banks. [27]

Yagmur Surmeli, DugyuVefikulkucay (2023) conducted a descriptive study on knowledge and opinion of Turkish parents about Human Milk Banking in Turkey. The objective of the study to determine the knowledge and opinion regarding human milk banks among Turkish parents with baby admitted in the neonatal intensive care unit. The Researcher selected 188 (94pair) as sample size. Data was collected by using questionnaire. The study result shows that all of the parents included in the study were married, 45.3% of the mothers and 46.3% of the fathers were between the ages of 27-35 years. Nearly half (49.5%) of the mothers were high school graduates and 25.3% of them were employed, while 53.7% of the fathers were high school graduates and 9.5% were unemployed. The study concluded that it was determined that although the education level of

the parents was high, their level of knowledge about breast milk banks was low-[28]

Lavina Rodrigues, Ashi Abrham, Ashlin Jeniciya D Almida(2023) conducted a cross — sectional on knowledge and attitude of postnatal mothers towards Human milk banking in Karnataka. The study objective was to evaluate postnatal mothers understanding and disposition regarding the concept of Human milk Banking. The researcher selected 50 postnatal women as sample. The data was collected through structured knowledge questionnaire and attitude scale. The data were analyzed by using SPSS version 23.0. The study result shows that, 70% of the postnatal mothers had good knowledge and 8% had average knowledge as well as 78% had favorable attitude and 22% had neutral attitude towards human breast milk banking. The study concluded that parents need to be educated about benefits of human breast milk banks is very much indispensable to provide nourishment to the infants also the choice and decision making among the parents in selecting an excellent feeding plan for their sick neonates [29]

Bahar Aztecan, (2023) et.al conducted a study on knowledge and attitudes of breastfeeding towards breast milk banking at Turkey. This study aim was to investigate the attitude of breastfeeding mothers

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towards breast milk banking and to determine potential impact of education increasing knowledge and awareness of breast milk donation. The researcher selected 303 breastfeeding mothers as sample through survey of mothers in healthy child and pediatrics clinic in between April 15, 2020 and September 1, 2020. A -20 Survey question survey was conducting face to face with the mother. The study result that the mean age was found to be 32.6±5.9 years. 67.7% of the mothers had heard of breast milk banking before, while 73.6% did not know if there was a breast milk bank in Turkey. Additionally, 61.7% of the mothers had a positive view of donating breastmilk, and 76.2% stated that they could give their milk to another baby if there was a need. The study concluded that the education levels and number

of pregnancies of the participating mothers increased, the rates of those considering donating breast milk also increased. [30]

Haixia Tu, Ping li, Lianlian Zhu (2022) conducted prospective study on postpartum women's view on Human Milk Banking in a city in southeast China. This study aims to understand women's acceptance of human milk banking in Wenzhou southeastern China. The researcher selected 305 postpartum women as sample through non probability using convenient sampling technique using questionnaire. The data was analyzed by using multivariable logistic regression analysis SPSS

22.0. The result shows that prevalence of willingness to donate human milk and use donor human milk in our study was 73.4% (224/305) and 44.6% (136/305), respectively. Employment (4.50) and human milk banking knowledge were independent predictors of willingness to donate human milk. Monthly household income in the previous year (4.06), awareness of human milk and knowledge of human milk banking (95%) were significantly associated with willingness to accept donor human milk. The study concluded that awareness of human milk banks among women in the first year of postpartum is low.[31]

Muthu Kumaran, Chanchal Lata, Usha et.al (2022) conducted a cross - sectional study to assess the knowledge on Human Milk Banking among final year student at Himanchal Pradesh. The study aim was to investigate the knowledge of nursing students in their final year about human milk banking. The researcher 63 students through non probability convenient sampling technique by using structured questionnaire. The data was analysed by using descriptive statistic by calculating mean, median and standard deviation and inferential statistics by applying ANOVA to assess the association of level of knowledge with selected demographic variables under study with SPSS. The study shows that 21% (13) of the final year Nursing Students had Inadequate Knowledge, 44% (28) had Moderately adequate Knowledge and only 35% (22) had Adequate Knowledge about Human Milk Banking. The study concluded that regarding optimal growth and development, the World Health Organization advises that newborns be exclusively breastfed for the first six months of life. [32]

Ms. Roshani, (2022) conducted descriptive study to Assess the Knowledge and Attitude Regarding Human Milk Donation Among Postnatal Mother in Selected Hospitals in Pune. The objectives of study to assess the knowledge and attitude regarding human milk donation among postnatal mothers. The researcher selected 100 postnatal mothers through non-probability sampling method by using structured questionnaire.

The data was calculated by using descriptive statistics. The result shows that 46% of majority postnatal mothers belongs to 23-26 age education, 52% postnatal mother belongs from joint family, majority of the mother ,79% were housewife and 21% where service women post-natal mothers are not having any previous knowledge about Human breast milk donation. The study concluded that the knowledge of postnatal mothers regarding Breast milk donation was average nearly poor level. [33]

Dr Parmees Kaur, Suksham Jain and Neha (2022) conducted descriptive study on Assessment of knowledge regarding human milk banking among mothers setting of labour room and postnatal ward at Chandigarh Medical college. The study objectives was to assess the knowledge regarding human milk banking among mothers The researcher selected 60 postnatal mothers through non- probability purposive sampling technique by using self — structured questionnaire. The study setting was labour room and postnatal wards of Government medical college of Chandigarh. The result shows that level of knowledge among mother was found to be that 48% had average knowledge, 40% had poor knowledge & only 12% had good knowledge. The relationship between socio-demographic variables and knowledge of mothers showed that the mother"s educational status was statistically significant. The study concluded that the majority of mothers have poor to average knowledge where only few had good knowledge regarding Human milk banking. [2]

Jaya Manik, Arti Madhukar Wasnik (2022) conducted pre- experimental study to assess the effectiveness of planned teaching program on knowledge regarding Human milk banking among GNM 3rd year student in selected college. The researcher selected 100 student of nursing school through non probability sampling technique by using questionnaire. The pre- experimental one group pretest post-test research design was used. The data was analysed by using descriptive and inferential statistics. The study result was that out of 100 subjects most of the subjects, 48 (48%) of subjects were in the age group of 18-20 years. 71 (71%) subjects were female. 62 (62%) subjects were urban area of residence. 58 (58%) subjects had previous knowledge regarding Human Milk Banking. 43 (43%) of them had information from books. The study concluded that the significant improvement of in the knowledge of subjects regarding breast milk banking.[34]

Manjit Annah Malatia, Makoma Bopape (2022) conducted a Qualitative study on Rurals nurses" views on breast milk banking in selected place in south Africa. The study aim was exploring and describing the views of nurses towards breast milk banking. The researcher selected total number of fourteen nurses through purposive sampling technique The data was collected by using one -on-one, semi structured interviews Data were collected over a period of three months from December 2016 to February 2017 at selected hospital. Data collection continued until saturation was reached at a total number of 14 participants, where all the questions had been covered and no newer information could be found from the participants. In the category of age, six participants were aged between 25 and 40 years, three were aged between 41 and 50 years, while five participants were more than 50 years. The study concluded that the almost all nurses at the hospital were knowledgeable about breastmilk banking. [35]

Federica Jackson, (2022) conducted a cross-sectional on Perception of Human Milk Banks as a response to the US infant formula Shortage in America. The study aimed to examined US mothers perception of human milk banks as a response to ongoing infant formula shortage in the United state. The researcher 863 respondent as sample through closed and open-ended item was used. The data was analysed by using descriptive and inferential statistics for statistical analysis. The study result was that more than half of the sample (53.4%) were aged 30–39, the majority identified as White/Caucasian (78.3%), 85.1% of the women were married, 72.5% had a bachelor"s degree or higher, and 71.6% were religious/spiritual. The study concluded that there is some level of support for milk banking as a potential "temporary" solution to the formula shortage and a tool that is currently being underutilized. [36]

Tolulope Ogundele, (2022) conducted cross — sectional study on knowledge and Perception of mothers towards Donor Milk and Human Milk Banking in Nigeria. The study aimed that to assess the knowledge and perception of mothers on breast milk donation and human milk banking in Nigeria. The researcher selected 402 mothers through non- probability convenient sampling technique used by using selfadministered questionnaire. Data was analysed by using SPSS version

22.0. The result shows that 46% of the women were aware of human milk banking, and the majority (56.8%) heard about this from a health professional. 39.8% were willing to feed their babies with milk from human milk bank, and 62.1% were ready to donate their milk. The study concluded that the number of women who have heard about milk donation and milk banking is suboptimal, with almost half interested in donating their breast milk. however, concerns like religion and disease transfer and other barriers to human milk banking should be addressed^{.[37]}

Hussaini A. Tahsildar (2022) conducted a study on mother knowledge and attitude on feeding of banked human milk among infants Dr Prabhakar kore Hospital Belgaum. The objective of this study was to assess the knowledge and attitude of mothers on feeding of banked human milk among infants and also to find out the association with sociodemographic variables. The researcher selected 100 postnatal mothers through non — probability convenient sampling technique by using self-structured questionnaire was prepared for knowledge and attitude among mother. The data was calculated by using descriptive statistic. The study result was that 9% mother had high knowledge, 42% mother had medium knowledge and 49% of them had low knowledge regarding breast milk banking. The study concluded that the different levels of knowledge and attitude and created awareness on donating and accepting of breast milk from milk banks among the mothers of infants toward feeding of banked among infants^[38]

Sr. Moncy Francis (2021) conducted a descriptive study on knowledge on Human Milk Banking among pediatric staff nurses in Kerala. The study objective was to assess the level of knowledge of pediatric staff nurses regarding human milk banking and to determine the association between the knowledge of staff nurses with their selected demographic variable. The sample was collected by using non- probability convenience sampling technique. The study sample size 45 paediatric staff nurses within age 28 — 45. The data was analysed by using descriptive and inferential statistics. The result shows that 15.5% samples were

having good knowledge; 69% had average knowledge and 15.5% were having poor knowledge. The study concluded that there was no association noticed between the levels of knowledge and any of the variables of the present study. [39]

P. Aparna, (2021) conducted a pre-experimental study to assess the effectiveness of structured teaching program on knowledge regarding human milk banking among mothers at selected villages of Baireddepalle mandal, Chittoor, District. The study objective was to assess the knowledge regarding human milk banking among mothers of infants. To evaluate the effectiveness of structured teaching programme on knowledge regarding human milk banking among mothers of infants. To find out the association between pre and post - test knowledge and socio demographic variables regarding human milk banking among mothers of infants. The researcher selected 60 mothers as sample through non - probability convenient sampling technique. The result shows that the study shows that the overall knowledge and knowledge on practice levels of mothers of infants regarding human milk banking. In pretest majority of the mothers (86.70%) were having inadequate knowledge followed by (11.70%) were having moderate knowledge and (1.70%) were having adequate knowledge. In post-test, majority of the mothers of infants (86.70%) were having adequate knowledge and only (13%) were having moderate knowledge. [40]

Rana Kamar (2021) conducted a non — experimental descriptive study on a study to assess the knowledge and attitude regarding human milk banking among final year students selected Nursing College Moradabad. The study objective was to assess the knowledge and attitude regarding human milk banking among final year students and To determine the association between knowledge and attitude with selected demographic variable. The researcher selected 130 final year nursing students as sample through non probability purposive sampling technique by using a self -administered Questionnaire and structured checklist. The data was analysed by using differential and inferential statistics. The study result was that there was 100% response rate. Of the total students, 64% students had average knowledge, 33% had knowledge and 3% had poor knowledge regarding the attitude, majority of students had positive attitude (88.8%) and (11.8%) had neutral attitude. The study concluded that Some of the successful breastfeeding mothers produce breast milk more than the amount needed for their babies [41]

Seyma Kalimeris's (2021) conducted a study on Views of postnatal mothers regarding human milk banking in Turkey. This study carried out to determine the view of postnatal mothers regarding human milk banking. The researcher selected 244 postnatal mothers" study was conducted between 25 June 2019 and 1 January 2020 at selected place by using questionnaire prepared by researcher. The data was analysed by using SPSS 23.0 statistic programme. The result shows that the mean age of postnatal mothers was 29.9. Of the mothers, 41% were primary school / secondary school graduates, 79.5% were living in nuclear families and 74.6% were unemployed. The majority of mothers (73.4%) wanted human milk banks in Turkey to be active, 72.5% considered donating their milk if there were a milk bank, 57.4% would like to benefit from the milk bank. The study conclude that the majority of mothers would like to donate to the milk bank and get milk there. [42]

Julia M. (2021) conducted a cross - sectional survey (December 2019 to February (2020) on knowledge, opinion and attitudes of polish women towards banking and donation of human breast milk. The aim of this study was to obtain information on the knowledge, opinions and attitude of polish women in terms of functioning of human milk banks, as well as the possibility to be a donor specific included consideration of responses in the socio demographic aspect and identification of factors influencing donation decisions. The researcher selected 871 women as sample through questionnaire contained 52 single and multiple- choice and open sided question. The data was analysed through chi square test used with p value of 0.05. The result shows that all women participating in the study, 604 (69%) were aware of the breast milk banks existence. 69% of respondents indicated the Internet, 10% a nurse or midwife, while only 4% a doctor as source of knowledge about human breast milk donation. [43]

Aysa Catalo Luk, (2021) conducted a descriptive study on investigation of midwifery students" knowledge, opinion and Religious Attitudes about breast milk banking in Turkey. The study aimed carried out to investigate the relationship between midwifery student knowledge, views and religious attitudes about breast milk banking. The researcher selected 230 students as sample through cross sectional and consist of students from faculty of health sciences midwifery department. The study sample was collected by using "descriptive information form". The study sample was calculated by using "Religious Attitude Scale". The result shows that the analysis of the students" responses to the questions checking their knowledge. In this study, it was found that most of the students had poor knowledge and negative opinions about BMB and that increased religious orientation led to taking a negative view against breast milk banking. The study concluded that the most of the students had poor knowledge and negative opinions about breast milk banking and that increased religious orientation led to taking a negative view against breast milk. [44]

Padma Priya D, (2020) conducted a comparative study to assess the level of knowledge on human milk bank among antenatal mothers at Department of obstetrics and gynecological Nursing in Saveeta Hospital Tamil Nadu. The study objectives were to assess the current level of knowledge on human milk bank among antenatal mothers in both in rural and urban areas, to compare current expertise on human milk bank among antenatal mothers in both rural and urban areas and to associate the current level of knowledge on human milk bank among antenatal mothers in both rural and urban areas with their selected demographic variables. The researcher selected 60 antenatal mothers as sample through non - probability convenient sampling technique. The data was collected by using self -structured questionnaire. The data was analysed by using descriptive and inferential statistics. The result shows that among 60 participants the mean score of the existence of knowledge among antenatal mothers 9.57 with standard deviation 3.25 and the mean score of the existing level of knowledge of the urban area was 6.60% with standard deviation 2.79. the mean knowledge difference score was 2.97. The study concluded that the existing level of knowledge on human milk bank among antenatal mothers was average and there is a need to improve the knowledge about human milk bank^[45]

Na Zhang, (2020) conducted cross-sectional survey on Factors Associated with postpartum women's knowledge, Attitude and practice regarding Human Milk Banking and Milk Banks in central China. The objective of study was to investigate postpartum women's knowledge, attitude and practice regarding human milk banks and milk donation and to analyze the influencing factors, to explore reasons why postpartum women reject milk donation and donor milk. The was conducted between February 2019 to July 2019. The researcher selected 1078 postnatal mothers as sample who returned to hospital for postpartum follow -up within 6 months participated in this survey (1078). The data was collected by using Questionnaire used to obtain sociodemographic data and determine participant's knowledge, Attitude and practice regarding Human Milk Banks and Milk Donation. The study result was that of the respondents, 216 (20%) had prior knowledge of human milk banks and milk donation. For the attitude, 811(75.3%) of participants held a supportive attitude for the establishment of human milk banks. The study concluded that majority of postpartum women are supportive of human

milk banks and more willing to donate breast milk than receive donor milk-[46]

Leila Doshmangir (2019) conducted a systematic review on factor influencing donations to human milk banks at Tabriz in Iran. The study objective was to increase the sensitivity and to find additional studies for systematic review, the reference list of the published studies as was examined as well. The researcher selected 36 samples with aged 14 to 33 years with different levels of schooling 58.3% of subjects participated were first-time mothers through interviews conducted out during home visits. The result shows that from a total of 1,157 articles, 31 met the inclusion criteria in which 64 factors are extracted from these, 26 factors act as barriers and 38 factors act as facilitators of milk donation. The study 1 concluded that, the most frequently reported reasons for donating breast milk were altruism and excess milk production. [47]

Seyda Can, (2019) conducted a cross sectional on knowledge regarding wet nursing and breast milk banking between December 2017 to march 2018 in Turkey. The study objective to determine the knowledge level of mothers regarding breast milk banking and wet nursing. The researcher selected sample 406 mothers as sample by using Questionnaire. The data was calculated by using IBM SPSS. The study result was that 34 of mothers (73.20%n=297 did not know about Breast Milk Banking (ASB). When the reason they did not want to benefit from ASB was inspected, 44.9%(n=115) of mothers stated that they did not trust breast milk banking. The study concluded that mothers who participated in the study had insufficient knowledge about breast milk banking and had various concerns about breast milk. [48]

Muge Yilmaz, Mualla Aykut (2018) conducted a descriptive study on knowledge attitude and practices about wet nursing and human milk banking in Turkey. The objective of study was to determine the knowledge, attitude and practices of mothers about wet nursing and human milk banking in Kayseri, Turkey. The researcher selected 614 participants as sample. The data was collected by using face to face interview with 33 Questionnaire. The data was analysed by using statistical package for social version 16.0. The study result was that of mother 94.5% had knowledge about human milk banking 97.2% had not knowledge about human milk banking and its purpose. The study concluded that more than half of the mothers thought that

milk banking was a correct application. Mothers who were opposed to milk banking showed religious justifications as reasons.[49]

Veena Melvani, (2018) conducted cross — sectional study on acceptance to voluntarily participate in breast milk bank activities in Bhopal. The aim of the study was to assess the awareness about breast milk banking among antenatal and postnatal women and their willingness to donate their breast milk to the bank or accept it from the bank. The researcher selected 350 antenatal and postnatal women as sample through purposive sampling technique by using pre-designed semi structured questionnaire. The study was conduct from 1 September to 30 November 2016. The data was collected by using pre-designed semi structured questionnaire. The study result was that out of 246 postnatal woman's who are interviewed ,86.6% women were currently breastfeeding their child. Knowledge regarding importance of colostrum meaning of exclusive breast feeding was present in 73.4% and 85% participants respectively. The study concluded that the knowledge about existence of breast milk bank in study participants was found to be very less lack of awareness about existence of breast milk banks was perceived as major barrier in utilisation of breast milk bank services^{.[50]}

Ahmat Ergin S. (2018) conducted descriptive study on knowledge Attitude and Behaviour on wet Nursing, Milk Sharing and human milk banking in Turkey. The purpose of the study was to determine Turkish women's knowledge, attitudes, and behaviors on wet nursing, milk sharing and the human milk banking in a primary care setting located in a semi-rural area. The researcher selected 240 as sample through structured questionnaire with closed ended and open - ended questions designed. The data was analysed by SPSS Software program for Windows Descriptive statistics. The result shows that women (12.5%) had had a wet-nurse; 20 women (8.7%) wet-nursed babies before; and 17 (7.2%) of the women"s children had a wet-nurse. If necessary, 80.9 and 78.3% were willing to accept to do wet-nursing and milk sharing, respectively. 150 (62.5%) heard of human milk banks; 55 (22.9%) approved of the establish human of milk banks. The study concluded that most of the women tend to become a wet nurse or do milk sharing if it is needed, but they are hesitant to donate their milk to human milk banks, mostly due to religious concerns^[51]

Renuka A (June2018) conducted an explorative study to assess the knowledge and attitude regarding storage of breast milk for the infants among staff nurses at KGMU, Lucknow. The study objective to assess the knowledge regarding the storage of breast milk for the infant among staff nurses, To find out the attitude regarding the storage of breast milk for the infants among staff nurses, To determine correlation between knowledge and attitude regarding the storage of breast milk for infants among staff nurses, To assess the association between the knowledge and selected demographic variables regarding the storage of breast milk bank for the infants, To assess the association between the attitude and selected demographic variables regarding the storage of breast milk for the infants. To develop information booklet for the staff nurses on storage of breast milk for the infants. The researcher selected 60 staff nurses through non-probability sampling technique by using self

-instructed questionnaire. The result shows that 15 (15%) of the studied mothers were adequate knowledge 35(35%) were in moderate knowledge, 50 (50%) were inadequate knowledge about storage of breast milk. The study concluded that staff nurses had average knowledge with a positive attitude towards the storage of breast milk^{.[52]}

Ikechukwu Kohl (2018) conducted cross-sectional Perception of donor breast milk and determinants of its acceptability among mother sin a developing community a multi-centre study in south-east Nigeria. The study aimed to assess the knowledge, acceptability and willingness to donate breast milk and use donated breast milk for their infants it also explored factors that determine this behaviour. The researcher selected 1235 mothers, through non- probability purposive and convenient sampling technique by using pretested questionnaire. The result shows total of 1235 mothers participated; 39% (480/1225) have heard about the concept of donor milk, while only 10% (79/759) and 7% (81/1179), respectively, had adequate knowledge of the concept and policy on donor milk. The study concluded that concept of donor breast milk and awareness of policies regulating its practice in

Nigeria is low, but the prospect of its acceptability is high among mothers surveyed in south-east Nigeria^{.[53]}

Yasmin Jahan, Antiquer Rahman (May 2017) conducted a qualitative study on mothers" knowledge and attitude toward breast milk Banking in developing countries in Bangladesh. The study aimed that to increase awareness among mothers regarding human milk banking developing countries Bangladesh. The data was collected by using face to face interviewing conducted for exploring the mother's knowledge regarding breast milk banking. The data was collected by using most recently national survey (among 117) countries from 2000-2013). The study result was that 53% in low-income countries, 61% in lower middleincome countries and 63% in upper income middle income countries corresponding. The study concluded that limited data on human milk banking as well as awareness regarding this issuein developing country like Bangladesh. [54]

Asha Bhatt (2017) conducted a descriptive study on knowledge and attitude regarding breast milk banking among final year B.Sc. nursing students Karnataka. The study objective was to assess the knowledge and attitude of B.Sc. Nursing students regarding breast milk banking and to find out the association of knowledge and attitude with selected demographic variables. The researcher selected 110 B.Sc. nursing students as sample from different three nursing colleges through non probability purposive sampling techniques by using semi- administered questionnaire. The data was analysed by using inferential statistic. The result shows that total students 64% student average knowledge 33% student had good knowledge and 3% student had poor knowledge regarding breast milk banking. The study concluded that majority of students had positive attitude (88.2%) and (11.8%) had neutral attitude. [55]

Aytan Senturk, (2017) conducted descriptive study on A Multi centre study for the determination of

health care staff's knowledge and Views about Breast Milk Banks Turkey. The study objective was to determination of nurse, midwife and physicians" knowledge and views to breast milk banks who works in the area of women's health and children's health. The researcher selected 344 nurses as sample collected using a form which was developed by researchers in February and October 2014. The data was analysed by using descriptive and inferential statistics. The result shows that 49.7% of participants were between 21-30 years of age, 64.5% had bachelor'sdegree, 50.3% were nurses, 23.0% were physicians. The study concluded that health care staff informed about this matter. It was suggested that providing the necessary conditions, breast milk banks could be established in Turkey.^[56]

H E Goodfellow, (2016) conducted a study on Perception of community based Human Milk Banks before and after training in a resource-limited South African. The study conducted by the survey on breastfeeding and banks. The study objective to determine mothers" perception of breastfeeding and CBHMB, and to ascertain how training could affect those perception. The researcher selected 40 black mothers as sample through non — probability convenient sampling technique by using re — administered following questionnaire. The result shows that a narrow majority of mothers, 23 of 40 58% were willing to donate breast milk. The researcher concludes that mother's own milk is not available, DHM provides a life saving second chance for vulnerable infants. [57]

Chitra Prajapati, (June 2014) conducted a quantitative study on a study to Assess the knowledge regarding breast milk banking among Asha worker an exceeding view to develop an information booklet in selected hospital. The objective study was To assess the level of knowledge regarding breast milk banking among Asha worker in selected hospital U.P, To find out the association between the level of knowledge regarding breast milk banking among Asha worker with their selected demographic variable. The researcher selected 110 Asha workers as sample through non — probability convenient sampling technique by using questionnaire. The data was analysed by using descriptive and inferential statistics. The study result was that respect to age 19 to 22year 29 (26.4%) were ,23 to 26 year 31 (28.2%) were, 27 to 30 year 27 (24.5%) were ,31 to 34 year 23 (20.9%) with the respect of education secondary education 53 (48.2%) were, higher education 37 (33.6%) were, Graduate 20 (18.2%). The study concluded that there was no association of knowledge score with their demographic variables. [58]

Catherine Ruth Mackenzi (2013) conducted qualitative study on Mothers knowledge of and Attitudes towards Human Milk Banking in south Australia. The objective of the study was explored the mother"s knowledge and attitude towards human milk bank, to inform the development of human milk banking policies and guidelines in south Australia should a milk bank be established. The researcher selected 12 mothers who were breast feeding and had preterm babies or sick babies as sample by using in depth semi structured interview. The 2 focus groups were conducted-1 with breastfeeding mothers as potential donors (n = 5) and the other with mothers of preterm or high-risk infants (n = 4) to answer questions raised by early analysis of the individual interview data. The study result was used Breastfeeding mothers, as potential

donors, unanimously supported donating their breast milk to a human milk bank, provided it would be easy and not overly time consuming. The study concluded that participants would welcome having access to a human milk bank for both donating and receiving milk in South Australia [59]

Irene Custodies (2011) conducted an observational longitudinal was conducted to assess the feasibility of providing donor breast milk to infants after pasteurizations. The objective of study to assess the feasibility of providing donor breast milk to infants in a resource limited Neonatal Prem Unit. The researcher selected 191 low birth weight infants as sample, out of them donor milk to and there was no evidence of bacterial contamination in the samples analysed, and no adverse events from feeding with donor breast milk. The result shows that 191 infants met the inclusion criteria of whom 96 received their mother"s own breastmilk. Of the 95infants who were potentially eligible to receive donor milk, only 40 did in fact receive donor milk. The study concluded that it is feasible to supply donor breastmilk to infants in an NPU in a resource limited setting, however staff needs to be sensitized to the importance of donor breastmilk to improve uptake rate^[60]

STATEMENT OF PROBLEM Assess knowledge regarding breast milk banking among postnatal mother's. **SETTING:** The study setting was Community **RESEARCH APPROACH** Health Centre Aligani, Lucknow Quantitative Research Approach TARGET POPULATION: Postnatal women who having 0-**RESEARCH DESIGN:** Descriptive Research 6-month age of baby Design SAMPLE SIZE AND SAMPLING TECHNIQUE 200 postnatal mothers who having 0-6month age of baby were selected by Purposive sampling technique **RESEARCH VARIABLE DEMOGRAPHIC VARIABLE Dependent Variable** INDEPENDENT VARIABLE In the Age, religion, education, occupation, family type, In the present study the postnatal mother's present study structured questionnaire no of children, family income, earlier information knowledge regarding breast milk banking was was the independent variable. about breast milk banking, source of information. dependent variable. **TOOL FOR DATA COLLECTION** Self- structured Questionnaire ANALYSIS & INTERPRETATION OF DATA Descriptive & inferential statistics on the basis of objective

Fig. no. 3.1 SCHEMATIC PRESENTATION OF RESEARCHMETHODOLOGY

RESEARCH APPROACH:

For the study the objective to be accomplished with **Quantitative Research** approach was considered to be most appropriate approach to Assess knowledge regarding breast milk banking among postnatal mothers.

RESEARCH DESIGN:

The research design of the study was **Descriptive research design.**

VARIABLES:

Dependent Variable: In this study dependent variable was knowledge regarding breast milk banking"

Independent Variable: In this study self- structured questionnaire was the independent variable.

Demographic Variable: Demographic variable was age, education, religion, qualification, type of family, no of deliveries family income and earlier information about breast milk banking, source of information.

STUDY SETTING:

The setting selected for the study was Aliganj, Lucknow.

TARGET POPULATION:

The target population for the study was "postnatal mothers who were having 0–6-month age of baby.

CRITERIA OF SAMPLE SELECTION:

Inclusion criteria:

The following various inclusion criterions used in the present study were:

- > The postnatal mothers who were willing to participate.
- ➤ Postnatal mothers who were having 0–6-month age of baby.

Exclusion criteria:

Exclusion criterions for the present study were postnatal mothers who were not willing to participate.

SAMPLE SIZE:

200 postnatal mothers for this study was postnatal mothers of 0- 6 month old baby, those mother were attending Aliganj CHC, PNC OPD, Lucknow.

SAMPLING TECHNIQUE:

Sampling technique used for the present study was "Purposive sampling technique"

SAMPLE SIZE CALCULATION:

Where,

Z2= Standard Normal Variants

(95% confidence interval z=1.96)

P = Expected proportion in population based on previous study.

e = Absolute error or precision. N=

population

DESCRIPTION OF THE TOOL:

Tool consists of two sections these are

Section A: Socio – Demographic Variables

Section B: Self — structured knowledge questionnaires regarding breast

milk banking.

Section A: Socio demographic variable:

This section consists of socio-demographic variables such as age, religion, education qualification, type of family, occupation, no of children, family income, earlier information about Breast Milk banking, source of information.

Structured knowledge questionnaire regarding Breast **Section- B:** Milk Banking:

This section consists of questions related to the knowledge regarding Breast Milk Banking among postnatal mothers od 0-6- month-old baby attending in PNC OPD in Aliganj CHC, Lucknow. The participants were requested to give the answer, according to asking questions by researcher. Researcher place a tick mark against the appropriate answer within the box. Correct answer was awarded with "1" mark while "0" mark was given for wrong answer.

Development of the tool:

The tool was developed by the investigator with the personal and professional experiences and with related review of literature like books, Journal, unpublished research studies and mass media. Subject experts and guide, refine and validated the developed tool.

Score Interpretation:

Section A- Socio – demographic Data

Researcher was prepared the coding sheet for socio — demographic data which was provided as respond by the postnatal mothers of 0-6-monthold baby.

Section B- Self -structured knowledge questionnaire:

Knowledge item score "1" awarded for each correct response and "0" for wrong response in all items, thus total 14 scores was allotted under the knowledge aspects and to interpret the level of knowledge. The score interpretation is as follow:

TABLE NO 3.1 SCORE INTERPRETATION OF SELF-STRUCTURED KNOWLEDGE QUESTIONNAIRE

S.no.		SCORE LEVEL	SCORE%
1.	Inadequate	0-5	<50%
2.	Moderate	6 -10	51-74%
3.	Adequate	10 — 14	>75%

ETHICAL CONSIDERATION:

- Written permission was taken from Vivekananda College of Nursing.
- Written permission was obtained from the authorities of VPIMS, Lucknow where the study is scheduled to be conducted.
- An official permission to conduct the study was taken from Internal Ethical Committee of Vivekananda Polyclinic & Institute of Medical Sciences, Lucknow.
- The informed consent was taken from the postnatal mothers who have 0 - 6-month age of baby.
- Confidentiality and anonymity of the subjects was maintained.

LETTER OF PERMISSION FOR THE ETHICAL **CLEARANCE**

Institutional Ethics Committee

Vivekananda Polyclinic & Institute of Medical Sciences, Lucknow - 226006, Uttar Pradesh, India

VPIMS/DHR/IEC/M.SC/DrNB/02/2024/0046

Date: 24.06.2024

Sukriti Pandey

M.Sc. Nursing (2st Year)

(2022-2024)

Vivekananda Polyclinic & Institute of Medical Sciences,

Vivekananda Puram, Lucknow, Uttar Pradesh -226007.

Subject:- Approval of synopsis submitted in view to conduct the study By Sukriti Pandey

Dear Sukriti Pandey,

During an IEC meeting we have reviewed and discussed the synopsis entitled:-"Assess knowledge regarding breast milk banking among postnatal mothers.." submitted by you to conduct the study in your respective department. The Members, Institutional Ethics Committee has discussed and approved the synopsis in its meeting held on in hybrid mode on 25th May 2024 at 3:00PM.

The following members of the Institutional Ethics Committee were present in the meeting held in hybrid mode on 25th May 2024 at 3:00PM.

Sr. No.	Name	Role of Member in IEC(DHR)	Voting	Mode of participation
1,	Dr. Raj Kumar Sharma	Chairperson	Yes	Online
2.	Dr. Manoj Kumar Mitra	Member	Yes	Online
3.	Swami Muktinathananda	Member Philosopher	Yes	Offline
4.	Dr. Prashant Shukla	Member Philosopher	Yes	Online
5.	Dr. Arun Sachdeva	Member Secretary	Yes	Offline
6.	Dr. U.K. Mishra	Alternate Member	Yes	Online
7.	Mr. Kumar Ayush	Member Legal Person	Yes	Online
8.	Dr. Rajeev Misra	Member Social Scientist	Yes	Online
9.	Dr. Richa Pandey	Member Lay Person	Yes	Online
10.	Dr. Vaishali Jain	Member Ex-Offico	Yes	Online
11.	Dr. Surya Kant Tripathi	Clinical	Yes	0001100000104001
12.	Dr. A.K. Saksena	Scientific	Yes	Online
13.	Dr. Archana Shukla	Member Social Scientist	Yes	Online Online

This is to confirm that only members who are independent of the proposed study have voted/provided opinion on the study.

EC Decision: Approved

The IEC make provisions to require investigators to keep the committee informed of the following of the points:

INSTITUTIONAL ETHICAL COMMITTEE

Institutional Ethics Committee

Vivekananda Polyclinic & Institute of Medical Sciences, Lucknow - 226006, Uttar Pradesh, India

- P.1 is supposed to provide the six-month report after the initiation of the project.
- P.1 is supposed to submit their full and final report before publication.
- P.I/ Student on supposed to submit their Data Soft Copy (Data to the EC after completion of the protocol synopsis.

Ethics committee experts to be informed about the progress of study, any changes in the protocol and patient information / informed consent and asks to be provided a copy of the final report.

We hereby confirm that Institutional Ethics Committee is organized and operates as per the Guidelines of ICH-GCP NDCT 2019 and all applicable regulatory requirements.

The IEC which reviewed the proposals is duly registered with the Ministry of Health & Family Welfare, Government of India. National Ethics Committee Registry for Biomedical and Health Research (NECRBHR). The committee i.e. IEC has approved conducting the study on above listed synopsis(s) of candidate for the purpose of writing their synopsis.

Kindly use the reference number (VPIMS/DHR/IEC/M.Sc/DrNB/02/2024) for all your future correspondence.

Thanks & Regards,

Dr. Arun Sachdeva (Member Secretary) Institutional Ethics Committee VPIMS, Lucknow

Secretary

strutional Ethics Committee VPIMS, LUCKNOW



After the validation of the tool, Pilot study was conducted in Sarojini Nagar, Lucknow 20.5.2024-25.5.2024 to assess the feasibility ad practicability of the study and to decide the statistical analysis for the researcher. Prior of the study, formal permission was taken from the Medical Superintendent of the Community Health Centre, Sarojini Nagar Lucknow. 20 Postnatal mothers those

selected by using purposive sampling technique. On the 1st day of data collection informed consent was obtained. Demographic data was collected by using selfstructured knowledge questionnaire among postnatal mother of 0-6-month-old baby.

RESULTOF PILOT STUDY

The data was calculated by using non-parametric test, the result reveals that the total score mean of 20 samples mothers was 7.4, whereas the standard deviation of data was +.36.8%. The minimum score was 00 and maximum score was 14. The data was analyzed 0.5 level of significant.

VALIDITY OF THE TOOL

The prepared content along with a validity seeking letter, acceptance form, problem statement, objective, hypothesis and operational definition was submitted to 7 experts and requested to give their opinion about the content and relevant, organized and measurable of the items. Among them five experts from the Obstetrics and Gynecological Nursing department and two experts from Child Health Nursing department. Checked and give validity of the tool. Most of the items agreed by the experts and the few items were modified based on the suggestions of the experts.

RELIABILITY OF THE TOOL

The tool was tested for reliability by administering the structured knowledge questionnaire among 20 postnatal mothers who were having 0– 6-month age of baby in Sarojini Nagar, Lucknow 29.4.2024 — 4.5.2024 The reliability of the tool was found 0.8 which indicates that the tool was reliable.

DATA COLLECTION PROCEDURE

- After getting Ethical permission, investigator explains to the participants in Hindi to understand the procedures to be followed in the study and its benefits.
- By the Purposive Sampling Technique, Investigator selected the samples according to the exclusion and inclusion criteria. Confidentiality and anonymity of the subjects was maintained.
- Written Informed consent was also being obtained to the same from the

participants.

- After getting the consent from the participants, on day one Knowledge of the participants was assessed through the self - structured knowledge questionnaire by open — ended interview method.
- After collecting the data, investigator analysed the level of knowledge pf participants with descriptive and statistical test.

PLAN FOR DATA ANALYSIS

The data was analyzed by Descriptive & inferential statistics on the basis of the objectives and hypothesis of the study.

Descriptive statistics

Frequency and percentage were used to analyzed the socio demographic variable. Mean and standard deviation was used to analyze the knowledge regarding Breast Milk Banking of postnatal mothers.

Inferential statistics

Chi – square test was used planned to be computed in order to association between the knowledge of postnatal mothers according to the selected demographic variables.

CHAPTER – IV

ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with analysis and interpretation of the data collected to assess knowledge on breast milk banking among postnatal mothers who were 0-6-month-old baby.

Polit and Hungler describe it as "a process of organizing and synthesizing data in such a way that research questions can be answered and hypothesis tested. [61]

Kerlinger (1973) define analysis as "the categorizing, ordering, manipulating and summarizing of data to obtain answer to research problem.[61]

"" Analysis is defined as categorizing, ordering, manipulating and summarizing of data to reduce it to interpretation form so that, research problem can be studied and tested including relationship between the variables. Analysis and interpretation are the process in which researcher examine the result from the data analysis. [26]

Hence the analysis and interpretation of the data was done based upon these following

OBJECTIVE OF THE STUDY:

- ❖ To assess the existing knowledge regarding breast milk banking among postnatal mothers.
- ❖ To find out association of knowledge scores among postnatal mothers regarding breast milk banking with their demographic variables.

RESEARCH HYPOTHESIS

The hypothesis was tested at the 0.05 level of significance.

H0: There was no significance association between knowledge score with their selected socio- demographic variables.

H1: There was a significance association between knowledge scores with their selected socio- demographic variables.

ORGANIZATION AND INTERPRETATION OF DATA

A self - structured knowledge questionnaire was prepared to assess knowledge regarding breast milk banking postnatal mothers. The data obtained was entered in a data sheet for tabulation and analysis by employing descriptive and inferential statistics. The analysis of data was organized and presented under the following sections on the basis of objectives and hypothesis.

Section I- Distribution samples subjects according of their socioto demographic variables.

Section II-Finding related to assessment of knowledge regarding breast milk banking among postnatal mothers who were having 0-6-month-old baby.

Section III- Finding related to association between the level of knowledge scores with their selected demographic variables.

SECTION – I

DISTRIBUTION OF SAMPLE SUBJECTS ACCORDING TO THEIR DEMOGRAPHIC VARIABLE

This section describes demographical characteristics. The sample characteristics were described in terms of age in years, religion, education, occupation, family type, no of children, family income (monthly), earlier information about breast milk banking, source of information.

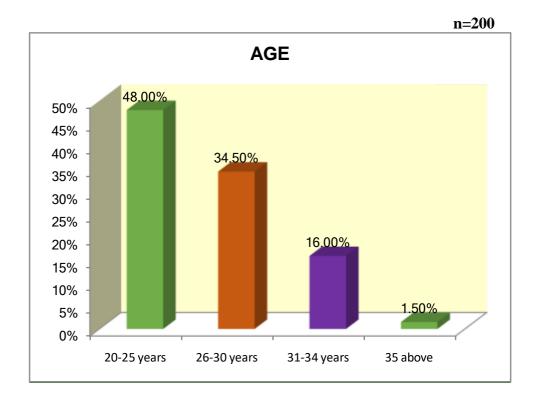
TABLE NO. 4.1 Frequency and Percentage distribution of sociodemographic variables

n=200

No.	Socio – Demographic Variable		Frequency	Percentage
			F	%
		20-25 years	96	48.0%
1.	AGE IN YEARS	26-30 years	69	34.5%
		31-34 years	32	16.0%
		35 above	3	1.5%
		Hindu	166	83.0%
2.	RELIGION	Muslim	34	17.0%
		Illiterate	13	6.5%
3.	EDUCATION	High school	60	30.0%
		Secondary school	28	14.0%
		Graduate	99	49.0%
		Housewife	182	91.0%
4.	OCCUPATION	Private job	8	4.0%
		Government job	9	4.5%
		Business	1	.5%
5.		Nuclear	66	33.0%
	FAMILY TYPE	Joint	133	66.5%
		Extended	0	.0%
		Single parent family	1	.5%
6.	NO OF CHILDREN	One	109	54.5%
		Two	77	38.5%
		Three	10	5.0%
		More	4	2.0%
7.		Below 10,000	81	40.5%
	FAMILY INCOME	10,001- 20,000	83	41.5%
	(monthly)	20,001 – 30,000	20	10.0%
		30,001 above	16	8.0 %
8.	EARLIER			
	INFROMATION ABOUT BMB	Yes	17	8.5%
	ADOUT DIVID	No	183	91.5%

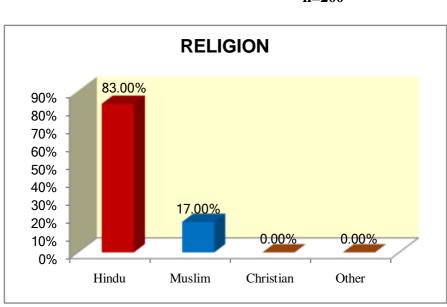
SOURCE OF	Newspaper	1	6.2%
INFORMATION	Internet	15	93.8%

Figure 4.1a: Bar graph showing percentage distribution of postnatal mothers according to the age group.



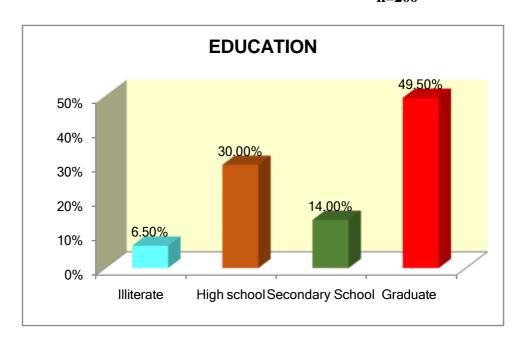
Data presented in graph no. 4.1(a) reveals that majority (48%)of postnatal mothers sample were belonged to age group of 20-25 years. Whereas 34.50% of mothers belonged to the age group of 26-30 years and 16.00% were 31-34 years where as 1.50% were above 35 years.

Figure 4.1(b) Bar graph Showing percentage distribution of postnatal mothers according to the religion.



Data presented in graph no. 4.1 (b) reveals that majority (83%) of postnatal women sample were Hindu, 17.0% were from Muslim.

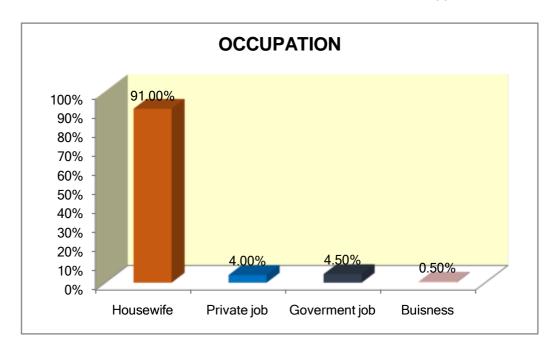
distribution **4.1** (c) Bar graph showing percentage of postnatal mothers according to education. n=200



Data presented in graph no 4.1(c) reveals that majority (49.50%) of postnatal mothers sample were graduate. Whereas (30.0%) were from High school and 14.0% were from secondary school,6.5% were illiterate

Figure 4.1 (d) Bar graph showing percentage distribution of postnatal mothers according to occupation.

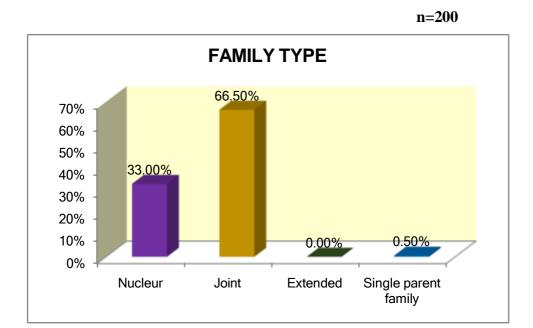




Data presented in graph no 4.1 (d) reveal that majority of postnatal mothers were

housewife (91%), followed by 4.0% mothers were in private job, 4.5% in postnatal mothers in government job, only 0.50% in business women.

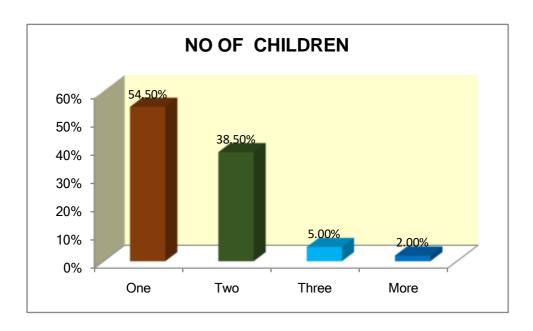
Figure 4.1 (e) Bar graph showing the percentage distribution of postnatal mothers according to the type of family.



Data presented in graph no. 4.1 (e) reveal that more than half mothers 66.50% of postnatal women were from joint family and 33% of women were from nuclear family and only few i.e. o.50% women were from single parent family.

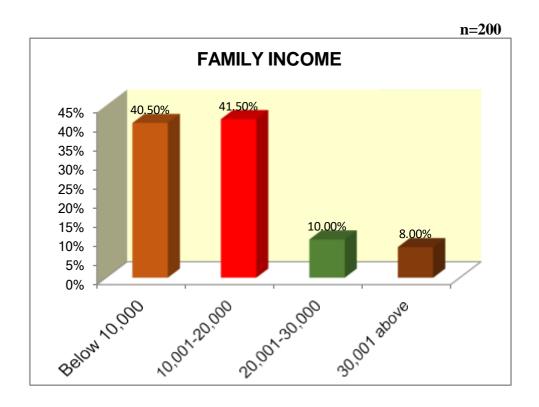
Figure 4.1 (f) Bar graph showing percentage of distribution of postnatal mothers according the Number of children.

n=200



Data presented in graph 4.1 (f) reveal that majority (54.5%) of postnatal mothers were had only one child, 38.5% of postnatal mothers were had two children and 5.0% were had three children, 2.0% postnatal mothers were had more than three children.

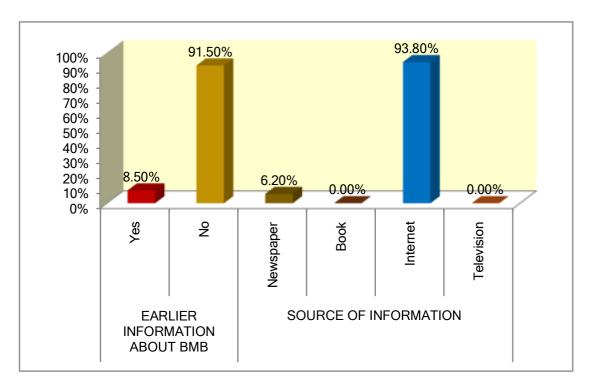
Figure 4.1 (g) Bar graph showing the percentage distribution of postnatal mothers according to the family income(monthly).



Data presented in graph 4.1(g) reveal that majority (41.5%) of postnatal mothers had monthly income in between Rs.10,000 — 20,000, (40.5%) postnatal mothers had monthly income below Rs.10,000 and (10.0%) postnatal mothers had monthly in between Rs.20,001-30,000, only 8.0% of postnatal mothers had Rs. 30,001 monthly incomes.

Figure 4.1 (h) column graph showing percentage distribution of postnatal mothers' earlier information regarding breast milk banking.

n=200



Data presented in graph no. 4.1 (h) reveals that majority of (91.5%) women had no earlier information about breast milk banking and only 8.5% postnatal mothers had earlier information about breast milk banking.

Those who had knowledge regarding breast milk banking among them 93.8% of women collected information from internet and only 6.2% of women got information from newspaper regarding breast milk banking.

SECTION - II

KNOWLEDGE OF POSTNATAL MOTHERS REGARDING BREAST **MILK BANKING**

This section describes the frequency percentage distribution of sample according to the level of knowledge regarding breast milk banking. The knowledge scores obtained through the structured knowledge questionnaire are analysed using descriptive statistics.

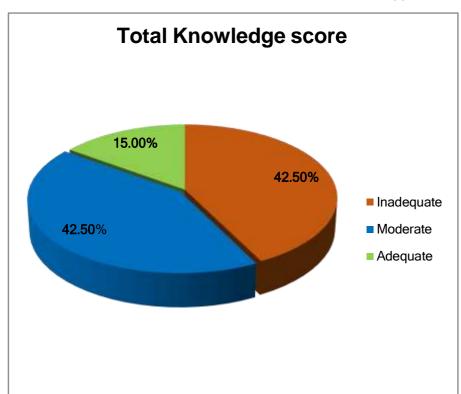
Table No. 4.2 Showing level of knowledge regarding Breast Milk Banking among postnatal mothers.

n=200

S.no.	Knowledge score	Scoring criteria	Frequency	Percentage
1.	Inadequate	0 - 5	85	42.5%
2.	Moderate	6 - 10	85	42.5%
3.	Adequate	10-14	30	15.0%

Figure 4.2Pie graph showing percentage distribution of sample subjects according to their knowledge regarding breast milk banking.





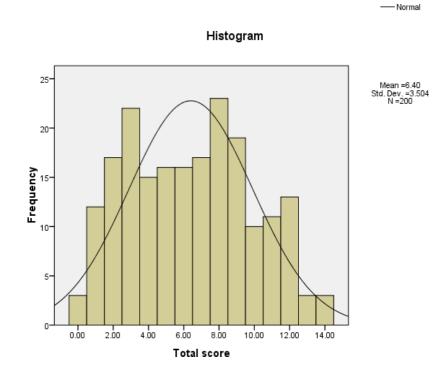
The pie graph 4.3 reveals that the majority (42.5%) of postnatal mothers had inadequate knowledge regarding breast milk banking, 42.5% postnatal mothers had moderate knowledge regarding breast milk banking and only 15.0% of postnatal mothers had adequate knowledge regarding breast milk banking.

Mean, standard deviation, mean percentage of knowledge score were calculated and are presented in table.

Table: 4.3

Table 4.3: Mean, standard deviation and mean percentage on level of knowledge regarding breast milk banking among postnatal mothers

	Mean	SD	Median	Min	Max	Valid N
Total score	6.40	3.50	6.00	.00	14.00	200



The data is calculated by using non — parametric test, the result reveals that the total score mean of 200 postnatal mothers was 6.40, whereas the standard deviation of data was +.3.50 and the median was 6.0. The total minimum score for the data was 00 and maximum score was 14.

SECTION - III

This section is revealed to testing of hypothesis i.e. association between level of knowledge scores with their selected demographic variables.

H0: There was no significance association between knowledge score with their selected demographic variables

H1: There was a significance association between knowledge scores with their selected demographic variable.

The data analyzed by chi – square. The are presented in table.

TABLE - 4.4

Association between level of knowledge scores regarding breast milk banking with their demographic variables among postnatal mothers.

n=200

Demographic variables	variables				Total sco	re		□²value	df	p value
		Inade	equate	Mod	lerate	Adeq	_[uate]			
		N	%	N	%	N	%			
AGE	20-25 years	57	67.1%	30	35.3%	9	30.0%	28.806	6	<0.001
	26-30 years	18	21.2%	39	45.9%	12	40.0%		I	
	31-34 years	9	10.6%	16	18.8%	7	23.3%			
	35 above	1	1.2%	0	.0%	2	6.7%			
	Total	85	100.0%	85	100.0%	30	100.0%			
RELIGION	Hindu	70	82.4%	68	80.0%	28	93.3%	2.838	2	0.242
	Muslim	15	17.6%	17	20.0%	2	6.7%			
	Total	85	100.0%	85	100.0%	30	100.0%			
EDUCATION	Illiterate	10	11.8%	3	3.5%	0	.0%	66.101	6	<0.001
	High school	41	48.2%	19	22.4%	0	.0%			
	Secondary School	18	21.2%	9	10.6%	1	3.3%			
	Graduate	16	18.8%	54	63.5%	29	96.7%			
	Total	85	100.0%	85	100.0%	30	100.0%			
OCCUPATIO	Housewife	81	95.3%	77	90.6%	24	80.0%	9.849	6	0.131
N	Private job	3	3.5%	3	3.5%	2	6.7%		 	
	Government job	1	1.2%	4	4.7%	4	13.3%			
	Business	0	.0%	1	1.2%	0	.0%			
	Total	85	100.0%	85	100.0%	30	100.0%			
FAMIL	Nuclear	29	34.1%	28	32.9%	9	30.0%	1.532	4	0.821
Y	Joint	56	65.9%	56	65.9%	21	70.0%			
TYPE	Extended	0	.0%	0	.0%	0	.0%			
	Single parent family	0	.0%	1	1.2%	0	.0%			
	Total	85	100.0%	85	100.0%	30	100.0%			
NO OF	One	49	57.6%	40	47.1%	20	66.7%	5.786	6	0.448
CHILDREN	Two	29	34.1%	38	44.7%	10	33.3%		I	1

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	Three	5	5.9%	5	5.9%	0	.0%			
	More	2	2.4%	2	2.4%	0	.0%			
	Total	85	100.0%	85	100.0%	30	100.0%			
FAMILY INCOME	Below 10,000	48	56.5%	29	34.1%	4	13.3%	27.866	6	<0.001
	10,001- 20,000	30	35.3%	37	43.5%	16	53.3%			
	20,001- 30,000	5	5.9%	12	14.1%	3	10.0%			
	30,001 above	2	2.4%	7	8.2%	7	23.3%			
	Total	85	100.0%	85	100.0%	30	100.0%			
EARLIER	Yes	1	1.2%	6	7.1%	10	33.3%	27.876	2	<0.001
NFORMATIO	No	84	98.8%	79	92.9%	20	66.7%		l	-
N ABOUT BMB	Total	85	100.0%	85	100.0%	30	100.0%			
SOURCE	Newspaper	0	.0%	1	20.0%	0	.0%	2.347	2	0.309
OFINFORM	Internet	1	100.0%	4	80.0%	10	100.0%		l	<u></u>
A TION	Total	1	100.0%	5	100.0%	10	100.0%			

Applied \Box^2 test for significance.

P value significant at 0.05 level of significance.

A chi — square test was conducted at explore the association between the knowledge of postnatal mothers who were having with their selected demographic variable. The result of this analysis, based on a sample of 200 participants, are summarized as follows:

1. AGE (IN YEARS):

The chi — square test for the age groups (20-25 year, 26-30 year, 31-34 years and above 35 years) knowledge level showed a chi – square value 28.806 with 6 degrees of freedom. The p value was < 0.001, which is significant.

2. RELIGION:

The chi – square test for the religion (Hindu, Muslim, Christian

and others) knowledge level showed a chi- square value 2.838 with 2 degrees of freedom and p value was 0.242. There is no statistically significant association between the religion.

3. EDUCATION:

The chi — square test for education (Illiterate, High school, Secondary school, Graduate) knowledge level showed a chi — square value 66.101 with 6 degrees of freedom and p value < 0.001, which is

4. OCCUPATION:

The chi — square test for the occupation (Housewife, Private job, Government Job, Business) knowledge level showed a chi square value 9.894 with 6 degrees of freedom p value 0.131 which is significant.

5. FAMILY TYPE:

The chi — square test for the family type (Nuclear, Joint, Extended, Single parent) knowledge level showed a chi square value 1.532 with 4 degrees of freedom and p value 8.21. There is no statistically significant association between the family type.

6. NO OF CHILDREN:

The chi — square test for the No of children (one, two, three and more) the knowledge level showed a chi — square value 5.786 with 6 degrees of freedom, p value 0.448. there is no statistically significant association between no of children.

7. FAMILY INCOME:

The chi — square test for the Family income (Below 10,000, 10,001- 20,000, 20,000-30,000 and 30,001 above)the

knowledge level showed a chi — square value 27.866 with 6 degrees of freedom p value < 0.001 which is significant.

8. EARLIER INFORMATION ABOUT BMB:

The chi — square test for earlier information about BMB the knowledge level chi square value 27.876 with 2 degrees of freedom p value < 0.001 which is significant.

9. SOURCE OF INFORMATION:

The chi square test for source of information knowledge level chi square value 2.347 with 2 degrees of freedom p value 0.309 which is not statistically significant.

DISCUSSION, SUMMARY, IMPLICATION, RECOMMENDATION AND **LIMITATION**

DISCUSSION:

Objective - 1: Assess the existing knowledge regarding breast milk banking among postnatal mothers.

In assessing the knowledge of the postnatal mothers regarding breast milk banking, it was observed that few (15.0%) of the participants comes into the category of "adequate knowledge "indicating a baseline level of knowledge among postnatal mothers. The majority of participants constituting the 42.5% exhibits an "Inadequate knowledge" level, while a similar proportion 42.5% participants constituting "Moderate knowledge level".

In study, the assessment of knowledge regarding breast milk banking among postnatal mothers revealed that the majority of postnatal mothers only (12%) had good knowledge and 48% postnatal mothers were had average knowledge and 40% postnatal mothers had poor knowledge. This finding aligns with a study conducted by Dr Parmees Kaur, Sukshma Jain and Neha (2022), which also reported the knowledge regarding postnatal mothers. [2]

Objective-2: Association of knowledge scores among postnatal mothers regarding breast milk banking with their selected demographic variables.

The association between the knowledge of postnatal mother with their selected demographic variable was explored through the chi — square test. The results indicated the non — significant associations, suggestions that factors such as Age, Religion, Education, Occupation, Family type, no. of children, Family income, Earlier information regarding breast milk banking did not significantly influence initial knowledge levels.

This study demonstrated a there a significant association between demographic variables (age, religion of postnatal mothers) and level of knowledge on human milk banking, but there was no association between education, occupation, type of family, previous information with level of knowledge on human milk banking, there is significant association between demographic variables (education, and attitude of postnatal mothers on human milk banking). This findings of a study by Ambika Chauhan (2021) where the assessment of knowledge regarding human milk banking among postnatal mothers^[3]

SUMMARY: The problem addressed in this study is the need to assess the knowledge of postnatal mothers who were having 0-6-month-old baby regarding the breast milk banking.

To address this problem, the study sets two primary objectives. First, it aims to assess the association between demographic variable and knowledge regarding breast milk banking among postnatal mothers. Second, to assess the association between demographic variables and knowledge regarding breast milk banking among postnatal mothers.

The hypotheses formulated for this study provide a framework for assess the knowledge regarding breast milk banking. H0 there will be no significance association between knowledge score with their selected demographic variables. H1 There will be a significance association between knowledge scores with their selected demographic variables.

The study utilized the quantitative research approach and employed a non — experimental research design. The research was conducted in the Community Health Centre Aliganj, Lucknow, with the target population being postnatal mothers who were having 0–6-month age of baby. The sample size of the 200 postnatal mothers who were having 0 — 6-month age of baby was selected by using Purposive sampling technique.

Data was collected through self- structured questionnaire comprising socio — demographic variables and questions related to the Breast milk banking. The questionnaire underwent development, refinement and validation by subject's experts. The tool was designated to assess participants knowledge level with scores Inadequate, Moderate and Adequate knowledge.

Data analysis included descriptive statistics for socio — demographic variables and knowledge scores as well as inferential statistics such as chi square to assess the knowledge of postnatal mothers. Ethical considerations, informed consent and confidentiality were prioritized throughout the research process.

MAJOR FINDINGS:

Section I: Description of sample characteristics

The study involved a sample of 200 postnatal mothers and the distribution of socio-demographic variables within the sample is detailed as follows;

- Age: The participants were categorized into different age groups with the majority of sample subjects were in the age group 20-25 years (48.0%), followed by 26-30 year (34.5%) and (16.0%) were in the age group of 31-34 years and only (1.5%) were in the age group of 35 above years old.
- Religion: the distribution of religion varied with majority of sample subjects were in the Hindu (83.0%) followed by Muslim (17%) and there were no sample subjects from Christian and others.
- Educational status: The distribution of educational status varied, with majority of sample subjects were Graduate (49.5%), followed by High school (30%) and secondary school (14%), and only illiterate (6.5%) background.
- Occupational status: a significant portion majority of sample subjects were Housewife (91.0%), followed by business (5%) and Government job (4.5%, only private job (4%) respectively.
- Family type: sample subjects were belonging to Joint family (66.5%) followed by nuclear family and

(.5%) single parent family.

- No of children: sample subjects were having one child (54.5%), followed by two (38.5%) and Three (5%) only (2%) having more respectively.
- Family income (monthly): Majority of postnatal mothers had income (41.50%) monthly income were in between 10,000-20,000, followed by (40%) were having monthly income below 10,000 (10.0 %) and only (8.0%) were having monthly income above 30,000 respectively.
- Earlier information about breast milk banking: Majority of postnatal mothers 91.5% of them had No earlier information about breast milk banking, followed by 8.5% were having earlier information about breast milk banking. Among 93.8% sample subjects have knowledge through the internet, followed by 6.2% were having knowledge from the newspaper.

Section II: Assessment of knowledge of postnatal mothers regarding breast milk banking

In this section, the knowledge of postnatal mothers regarding breast milk banking divided into three category inadequate, moderate, adequate knowledge majority of postnatal mothers who were having 0-6-month age old baby had inadequate knowledge (42.5%), whereas postnatal mothers had moderate knowledge regarding breast milk banking (42.5%) and postnatal mothers had adequate knowledge (15.0%) regarding breast milk banking.

Section III Association between level of knowledge scores with their selected demographic variables

This section involves the association between knowledge scores with their selected demographic variables age, education family income earlier information about breast milk banking and knowledge regarding breast milk banking there was significant association but there was no association between (religion, occupation, family type and no of children) with level of knowledge on breast milk banking.

Conclusion of study

In conclusion, the study assessment of postnatal mothers" knowledge regarding breast milk banking who were having 0-6 month of age of baby. The findings revealed that knowledge majority of postnatal mothers who were having 0–6-month age old baby had inadequate knowledge (42.5%), whereas postnatal mothers had moderate knowledge regarding breast milk banking (42.5%) and postnatal mothers had adequate knowledge (15.0%) regarding breast milk banking. The association between knowledge scores with their selected demographic variables

The focus of this study was to assess knowledge regarding breast milk banking among postnatal mothers. Descriptive research design was used.

200 postnatal mothers who having 0-6month age of baby were selected from the community through

purposive sampling technique. The data was collected by using structured questionnaire. Data was analyzed by using descriptive and inferential statistics.

The study suggests implication Nursing education, Nursing practice, Nursing administration, Nursing research emphasizing the role of health care professionals particularly nurses, in promoting informed child care practice. Overall, the study supports the importance of knowledge needed of postnatal mothers regarding breast milk banking.

IMPLICATIONS OF THE STUDY:

1. NURSING EDUCATION:

- Nursing curriculum at obstetrics and pediatrics nursing areas should have more content on breast milk banking.
- The curriculum should appraise and guide the parents especially vulnerable group of postnatal mothers who breast feed their child.
- The nurse can work as a health educator and arrange classes or health education programme by providing information regarding breast milk banking.
- Keeping the current and future needs in mind basic nursing curriculum should lay more emphasis on child and maternity nursing unit.

2. NURSING PRATICE:

- The expended role of the professional more emphasizes those activities which promote health promotion and prevention behavior among people.
- The nursing service department can have knowledge regarding breast milk banking for teaching clients, families, parents, mothers and communities. This will help the nursing profession also to advance more towards the goal of providing holistic client care.

3. NURSING ADMINISTRATION:

- The nurse administrator can prepare modules, manuals, health programmes regarding breast milk banking and use the findings and contents of the study.
- The findings on knowledge regarding breast milk banking among postnatal mothers can also be used as a guide for planning in service programme and for educate nurses, with an emphasis on the role of the nurses in imparting health education to mother and their family.

4. NURSING RESEARCH:

- Based on the findings of the study nursing theories can be evolved, which will strengthen the field of nursing research.
- The present study contributes to the body of knowledge regarding breast milk banking among postnatal mothers.
- The study will serve as a guideline for further research.

RECOMMENDATIONS FOR FUTURE STUDIES:

On the basis of the findings study following of the the recommendations are made.

- 1. The same study can be replicated on a larger samples or different setting for a longer duration to validate the findings and broaden the generalization.
- 2. A comparative study can be carried out to ascertain the knowledge and attitude between
- Rural and urban areas as a whole
- Private and government hospitals
- The similar study can be conducted among pregnant women.
- 4. A similar study can be conducted on assess knowledge, attitude and practice among postnatal mothers.
- 5. A similar study can be replicated with control group.

LIMITATIONS:

- The study generalizability is limited to the specific context of community Health Centre Aliganj, Lucknow.
- The findings may not fully capture regional variation in knowledge levels.
- The study reliance on a single health care setting may affect the transferability of results to diverse healthcare environment
- The structured questionnaire subjectivity introduce response bias. may
- The study duration and scope may limit the depth of insights into long term knowledge retention.
- External factors such as socio demographic changes during the study may influence the participants response
- The exclusion of certain demographic group may impact the study representativeness
- The study focuses on postnatal mothers who having 0-6 month age of baby.

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ANNEXURE – I

LETTER REQUESTING PERMISSION TO CONDUCT RESEARCH **STUDY**

LETTER REQUESTING PERMISSION TO CONDUCT RESEARCH STUDY

To.

The Principal,

Prof. Thangam Sheela Rosaline,

Vivekananda College of Nursing, Lucknow

Subject: Permission to conduct Research study.

Dear Madam.

With due respect I am Ms. Sukriti Pandey is a M.Sc. (N) I Year student of Vivekananda College of Nursing, Lucknow. As a part of M.Sc. (N) programmed, I required to submit the dissertation to Atal Bihari Vajpayee Medical University, Lucknow, (Uttar Prasad) for the partial fulfillment of my requirement. I have planned to conduct a study on

"Assess knowledge regarding Breast Milk Banking among postnatal mothers"

SoI request you to kindly permit me to conduct Research study and collect the required data concerned inmates. The identity and information gathered from participant will be strictly kept confidential and will be used only for the research study.

Thanking you.

Yours sincerely

Sukriti Pandey

M.Sc. (N) I year

Vivekananda College of Nursing



ANNEXURE -II

LETTER REQUESTING PERMISSION TO CONDUCT RELIABILITY TEST

REQUEST FOR PARTICIPATION IN RELIABILITY TESTING FOR SELF-STRUCTURED QUESTIONNAIRE

To

Mr. Chandan Kumar Singh Yadav Medical Superintendent CHC, Sarojini Nagar Lucknow, U.P. (Through Proper Channel)

Subject: Permission to conduct Reliability Testing for Self- Structured Questionnaire

Dear Sir/Madam,

The bearer of this letter Ms. Sukriti Pandey is M.Sc. (N) II Year student of Vivekananda College of Nursing, Lucknow. As a part of the M.Sc. Nursing programme, she is required to submit the dissertation to the Atal Bihari Vajpayee Medical University, Lucknow, Uttar Pradesh, for the partial fulfilment of her requirement. She has planned to conduct a study on "ASSESS KNOWLEDGE REGARDING BREAST MILK BANKING AMONG POSTNATAL MOTHERS".

I request you to kindly permit to conduct the reliability test and collect the required data from postnatal mother who are residing in Sarojini 'Nagar, This study will not cause any inconvenience to the participants and the identity and information of the participants will be strictly kept confidential and will be used only for the purpose of research study.

Thanking You

Date:

PRINCIPAL

Vivekananda College of Nursing

Lucknow, U.P.

ANNEXURE – III

LETTER REQUESTING PERMISSION TO CONDUCT PILOT SYUDY

REQUESTING LETTER PERMISSION TO CONDUCT PILOT STUDY

To

Chandan kumar Singh Yadav Medical Superintendent CHC, Saudjhi Magar, Luck how. Lucknow, U.P. (Through Proper Channel)

Subject: Permission to conduct Pilot study

Respected Sir/Madam,

The bearer of this letter Ms. Sukriti Pandey is M.Sc. (N) II Year student of Vivekananda College of Nursing, Lucknow. As a part of the M.Sc. Nursing programme, she is required to submit the dissertation to the Atal Bihari Vajpayee Medical University, Lucknow, Uttar Pradesh, for the partial fulfilment of her requirement. She has planned to conduct a study on "ASSESS KNOWLEDGE REGARDING BREAST MILK BANKING AMONG POSTNATAL MOTHERS"

I request you to kindly permit her to conduct the Pilot Study and collect the required data. The identity and information gathered from participant will be strictly kept confidential and will be used only for the purpose of research study.

Thanking You

Your Sincerely

PRINCIPAL

Vivekananda College of Nursing

Lucknow, U.P.



ANNEXURE – IV

LETTER REQUESTING PERMISSION TO CONDUCT **MAIN STUDY**

REQUESTING LETTER PERMISSION TO CONDUCT RESEARCH STUDY

To

Dr. Mayant medical officer community Health Center Aligang Luckhow. Lucknow, U.P. (Through Proper Channel)

Subject: Permission to conduct Research study

Respected Sir/Madam,

The bearer of this letter Ms. Sukriti Pandey is M.Sc. (N) II Year student of Vivekananda College of Nursing, Lucknow. As a part of the M.Sc. Nursing programme, I required to submit the dissertation to the Atal Bihari Vajpayee Medical University, Lucknow, Uttar Pradesh, for the partial fulfilment of her requirement, 1 planned to conduct a study on "ASSESS KNOWLEDGE REGARDING BREAST MILK BANKING AMONG POSTNATAL MOTHERS"

I request you to kindly permit to conduct the Research Study and collect the required data. The identity and information gathered from participant will be strictly kept confidential and will be used only for the purpose of research study.

Thanking You

Your Sincerely

PRINCIPAL

Vivekananda College of Nursing

Lucknow, U.P.

Erom

ANNEXURE-V

CONTENT VALIDITY

110111	IOOL
Ms. Sukriti Pande	y
MSc. Nursing stud	dent Vivekananda
College of Nursin	g Lucknow, (U.
P.)	

Γο,	
	(Through Proper
Channel)	

TOOI

Subject: Request for expert opinion and suggestions to establish content validity of the research tool.

Respected Sir/ Madam,

I Sukriti Pandey, MSc. Nursing student of Vivekananda College of Nursing, Lucknow have selected the following topic for my dissertation to be submitted to Atal Bihari Vajpayee University, (U.P.) in partial fulfillment for the requirement for award of Master of science in Nursing.

Topic: "Assess knowledge regarding Breast milk Banking among postnatal mothers.

Here with I have enclosed objective of the study, hypothesis of the study and research methodology, Demographic Performa and tool and Criteria checklist. I humbly request you to go through the items and give your valuable suggestion and option to develop the content validity of the tool, kindly suggest modification, addition and deletions, if any, in the remark column.

Thanking you in anticipation

Date -

Place - Lucknow

Yours faithfully

Ms. SukritiPandey

M.Sc. Nursing

CONTENT VALIDITY CERTIFICATE

This is to certify that the tool developed by Ms. Sukriti Pandey M.Sc.Nursing IInd student of Vivekananda College of Nursing, Lucknow (Affiliated to Atal Bihari Vajpayee Medical University U.P.), undertaking research on. Topic- "Assess knowledge regarding Breast Milk Banking among postnatal mothers" has been validated by the undersigned can proceed with this tool and conduct the main study of research.

Place

Name

Designation:

Signature:

CRITERION CHECKLIST FOR THE DEMOGRAPHIC **VARIABLES VALIDATION**

Respected Sir/Madam,

Place review the items in the tool and give your valuable suggestions regarding relevance, measurable, organized appropriateness of the content, kindly place a tick ($\sqrt{}$) in a appropriate column, if there are any suggestions or comments please mention in the remarks column.

PART 1 – DEMOGRAPHIC VARIABLES

Content	Rel	evant	Orga Appro	nized priate	Measur	rable	
	Agree	Disagree	Agree	Disagree	-Agree	Disagree	Remark
1. Age							
2. Religion							
3. Type of family							
4. Educational - Qualification							
5. Do you ever heard about breast milk banking?							
• If yes source of information?							

St	18	g	e	st	i	01	n	S																																																														
					-	-	-	•			•	-	•	-	-			-	•	•			•	-	•							-	•	•			•	•	•	•		•								•			•	•		-	•	•			-		•	•		•		•		
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• •																																																																						
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•																																																																						
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Full Name and Signature

CRITERION CHECKLIST FOR STRUCTURED KNOWLEDGE **QUESTIONNAIRE**

Respected Madam/ Sir

Kindly go through the tool on knowledge assessment questionnaire and please tick ($\sqrt{}$) in the column provided against each item of the relevance adequacy and accuracy of each items, kindly give comments in the remarks column.

NO OF ITEM	RELEV	ANCE	ADEQUA	ACY	ACCUR	ACY	ORGA	NIZATION
S	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree
1								
2								
3								
4								
5								
6								
7								
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19								
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23								
24								
25								
26 27		1						

7. गोननीम - ववषमों की गोननीमता औय गुभनाभी फयकयायियीजाएगी।

8. प्रततबागगमों के अगधकाय - प्रततबागगमों को बफना ककसी दोड केककसी बी सभम अध्ममन भें बाग रेने मा वानस रेने की स्वतात्रता है।

9. अध्ममन भें बागीदायी के मरए वैकजल्तक - कोई ववकल्त रागु नहीं। अध्ममन केवर शोध उद्देशम के मरए है। आऩ अध्ममन भें बाग रेने का तनणाम रेने के मरए स्वतात्र है

भाग 2

_		_	_
ш	$e_{\rm L}$		$\overline{}$

1. भैं नुजटट कयता हूं। कक भैंने	उऩयोक्त ३	अध्ममन	क मर	ए							
टदनाोक	_सूचना :	तत्र को	ऩढ़ ३	औय	सभझ	मरमा है	औय भुझे	प्रश्न	ऩूछने	का	अवसय
मभरा है।											

भुझे अन्वेषक द्वाया अध्ममन की प्रकृतत के फाये भें सभझामा गमा है औय प्रश्न नूछ ने का अवसय मभरा है।

2. भैं सभझता हो कक अध्ममन भें भेयी बागीदायी स्वैजछछक है औय भैं ककसी बी सभम, बफना कोई कायण फताए औय अनुनी गचककत्सा देिबारमा कानूनी अगधकार्यों को प्रबाववत ककए बफना वानस रेने केमरए स्वतोत्र हो।

भैं सभझता हो कक जक्रतनकर नयीं ण/नरयमोजना के प्रामोजक, प्रामोजक की ओय से काभ कयने वारे अन्म, नैततक समभतत औय तनमाभक अगधकारयमों को वताभान अध्ममन औय ककसी बी आगे केशोध के सोफोध भें भेये स्वास््म रयकॉडा को देिने के मरए भेयी अनुभतत की आवश्मकता नहींी होगी। इसके सोफोध भें कायावाई की

जासकती है, बरे ही भैं भुकद भे से हटजाऊो। हाराॉकक, भैं सभझता

हूँ कक तीसये नं को जायी मा प्रकामशत ककसी बी जानकायी भें भेयी नहचान उजागय नहीं। की जाएगी।

4. भैं इस अध्ममन से उत्तन्न ककसी बी डेटामा तरयणाभ के उत्तमोग को प्रततफोगधत नहीं। कयने तय सहभत हूं, फशते ऐसा उनमोग केवर

वैं तिनक उद्देश्मों क मरए हो।

5. भैं उनयोक्त अध्ममन भें बाग रेने के मरए सहभत हो

ववषम	ı के हस्ता ंय 9 मा	अोगूठे का	तनशान)/कानूनीरूऩ	से	स्वीकामा। प्रततत	नगध:	हस्तांय
कताा	कानाभ						

तायीि: ववषम के साथ सोफोध अन्वेषक का

कथन:-

भैंने, नीचे हस्तां प कता। ने अननी भारे को उस बाषा भें सभझामा है जजसे वह अध्ममन भें अननाई जाने वारी प्रकिमा औय जोखिभों औय राबों को सभझती है।

ATAL BIHARI VAJPAI MEDICAL UNIVERSITY, U.P. LUCKNOW INFORMED CONSENT FORM

Study Title: "Assess knowledge regarding breast milk banking among postnatal mothers"

Study Number:

Subject

Contact details of Investigator:

Full Name	•••
Date of Birth or Age	•••••
Address	PART 1

- **1. Purpose of the study "**Assess knowledge regarding breast milk banking among postnatal mother"
- **2.** Study Procedure After selection of the participants, self-introduction and purpose of the study will be explain also be obtained the socio demographic data, and provide self structured questionnaire.
- **3. Risk from the study** The study will be no harm /risk to the subjects in the study.
- **4. Benefits from the study** The study will help to know about breast milk banking in postnatal mothers.
- **5.** Complication No.
- **6.** Compensation Participants not will be charged nor awarded.
- **7.** Confidentially Confidentially and anonymity of the subjects will be maintained.
- **8. Rights of Participants** The participants have the freedom to participate or withdraw from the study anytime without penalty.
- **9.** Alterative to participation in the Study No alternative applicable. The study is for research purpose only. You are free to decide for participation in the stud

PART 2

CONSENT

- 1. I confirm that I have read and understood the information sheet dated for the above study and have had the opportunity to ask questions.**OR** I have been explained the nature of the study be by the investigator and had the opportunity to ask questions.
- 2. I understand that my participation in the study is voluntary and that I am free to withdraw at any time, without giving any reason and without my medical care or legal rights being affected.
- **3.** I understand that the sponsor of the clinical trial/project, other working on the sponsor"s behalf, the Ethical Committee and the regulatory authorities will not need my permission to look at my health records both in respect of the current study and any further research that may be conducted in relation to it, even if I withdraw from the trial. However, I understand that my Identity will not be revealed in any information released to the third parties or published.
- **4.** I agree not to restrict the use of any data or results that arise from this study provided such a use is only for scientific purpose(s)

ISSN:2455-26315. I agree to take part in the above study	March	n 2025 IJSDR Volume 10 Issu
Signature 9 or thumb impression) of the subject	ct/ Legally	Acceptable.
Representative:		
Signatory 's Name: Date: Relationship with Subject:		
<u>Investigator's Statement: -</u>		
I, the undersigned have explained to the mother in a lan		inguage she understands
the procedure to be followed I the study and risks and b	enefits.	
Signature of the Investigator: Name of the Investigator: Signature of the Witness: Date: Name of the Witness:	2001	Date:
ANNEXURE – VII T SECTION - A	OOL	
SOCIO DEMOGRAPHIC V	/ARIARI	ES
INSTRUCTIONS: Kindly read the questions can		
appropriateanswer in the column provided a	-	
1. Age		
(a) 20-25		
(b) 26-30year		
(c) 31-34year		
(d) 35 above		
2. Religion		
(a)Hindu (b)Muslim		
(c)Christian		
(d)Other		
3. Education		
(a) Illiterate		
(b) High school		
(c) Secondary School		
(d) Graduate		
4. Occupation		
(a) Housewife		
(b) Private Job		
(c) Government Job		
(d) Business		

ISSN:2455-2631 5. Type of family	March 2025 IJSDR Volume 10 Issue 3
(a) Nuclear	
(b) Joint	
(c) Extended	
(d) Single parent family	
6. No of deliveries	
(a) one	
(b) Two	
(c) Three	
(d) More	
7. Family Income(Rs. per monthly)	
(a) Below 10,000	
(b) 10,001-20,000	
(c) 20,001-30,000	
(d) 30,001 above	
8. Earlier information about breast milk banking?	
(a) Yes	
(b) No	
*If yes, Source of information?	
(a) Newspaper	
(b) Book	
(c) Internet	
(d) Television	
SECTION – B	
SELF - STRUCTUREDKNOWLEDGE QUESTION	ONNAIRE
1. What are the benefits of "Breast Milk Banking?	
(a) Improve newborn care	
(b) Prevent them from disease	
(c) Help them grow up strong and healthy.	
(d) All of the above.	
2. Which babies require more breast milk those who a	re admitted
in N.I.C.U.?	
(a) Sick preterm	
(b) Low birth weight baby	
(c) Both a and b	
(d) Only b	

3. What is best method for collection of breast milk from donors?	
(a) Manual expression	
(b) Breast pump expression	
(c) Vacuum expression	
(d) Syringe expression	
4. After delivery what is the ideal time for first expression of breast	
milk?	
(a) Within 30 min	
(b) Within 1 hours	
(c) Within 2 hours	
(d) Within 3 hours	
5. How many times can a donor expressed breast milk in a day?	
(a) 8 times/day	
(b) 9 times/day	
(c) 10 times/day	
(d) 11 times/day	
6. How much is the prize to buy donating milk from human milk	
banks in India?	
(a) 100 rupees for 50 ml	
(b) 150 rupees for 50 ml	
(c) 200 rupees for 50 ml	
(d) 250 rupees for 50 ml	
7. Which type of container is used to store breast milk in breast milk	
bank?	
(a) Glass and steel	
(b) Glass and Aluminum	
(c) Steel and Aluminum	
(d) Polythene and Aluminum	
8. What test is mandatory for donor selection?	
(a) Serological screening	
(b) Complete blood count	
(c) Liver function test	
(d) Kidney function test	
9. What are the equipment used in breast milk banks?	
(a) Pasteurizer, deep freezer, refrigerator, hot air oven, autoclave.	
(b) Breast milk pump, generator, pasteurizer, deep freezer.	
()	

ISSN:2455-263	(c) Suction, electric breast milk pumps, pasteurizer, refrige	<mark>flarch 2025 IJSDR Volu</mark> erator	ume 10 Issue 3
	(d) Deep freezer, hot air oven, pasteurizer, refrigerator.		
	10. What are all the method to improve milk ejection? (a)Massaging,stroking,shaking (b)Stroking,shaking,massagi	ng	
	(c) Shaking, massaging, stroking		
	(d)Squeezing,massaging,pulling,stroking		
	11. How many amounts of mother milk is required for	or post	
	pasteurization culture?		
	(a) 1 to 2 ml		
	(b) 2 to 4 ml		
	(c) 4 to 6 ml		
	(d) 6to 8 ml		
	12. Which mother is not suitable for donating milk?		
	(a) Acute infection in mastitis		
	(b) Rubella or varicella infected		
	(c) Herpes simplex virus infected		
	(d) All of the above.		
	13. Which mother are suitable for donate milk in bar	nks?	
	(a) Healthy and not have any risk of infection.		
	(b) Willing to blood testing for screening of infection.		
	(c) Have enough milk after feeding her baby		
	(d) All of the above.		
	14. How much first expressed milk is discarded to r	educe bacterial	
	contamination?		
	(a) 2- 5 ml		
	(b) 5-10 ml		
	(c) 15-20 ml		
	(d) 20-25 ml		

ANSWER KEY

QUESTION 8. A
QUESTION 9. A
QUESTION 10. A
QUESTION 11. A
QUESTION 13. D
QUESTION 14. A

खोंि -क

सामाजजक जन साोजख्यकीय िर

ननदेश: कृतया प्रश्नों क्रो ध्यान से तढ़ें और उचित ($\sqrt{}$) का ननशान ग़गाएँ। प्रत्येक आइटम के सामने ददए गए कॉर्स्म में उत्तरदें।

1 આયુ	
(क) 20-25 वषा	
(ख) 26- 30 वषा	
(ग) 31-35 वषा	
(ঘ) 35 वषाऊनय	
2. धमि	
(क) टहोंदू (ख) भुजस्रभ	
(ग) ईसाई (घ) अन्म	
3. र्श ंा (क) अनत्तढ़	
(ख) हाईस्कूर	
(ग) भाध्ममभकववद्मारम	
घ) स्नातकोत्तय	

ISSN:2455-2631		March 2025 IJSDR Volume 10 Issue 3
	4. व्यवसाय (क)	
	गृटहणी (ख) तनजी नौकयी	
	(ग) सयकायी नौकयी	
	(घ) गृह व्यवसाम	
	 तरखार का प्रकार (क) एकर 	
	नरयवाय (ख) सॉमुक्त	
	(ग) ववस्तारयत	
	(घ) एकर अमबबावक तस्यवाय	
	6. िच्िों की सोख्या	
	(क) एक	
	(ख) दो	
	(ग) तीन	
	(घ) अगधक	
	7. नाररवाररक आय (प्रनतमाह रु.)	
	(क) 10,000 सेनीचे	
	(জ্ব) 10,001-20,000	
	(π) 20,001-30,000	
	(ঘ) 30,001 জনয	
	8 -क्या आत्मे कभी ब्रेस्ट र्मल्क िैंक्कोंग के िारे में सुना है?	
	(क) हाॅं	
	(ख) नहीं।	
	अंग्रहर को जो जानामी कर र गेर ी	
	*यदद होो, त्रो जानकारी का स्रोत?	
	(क) अिफाय (ख) नुस्तक (ग)	
	इॊटयनेट (घ) टेरीववजन	

खॉि- ख

सोरचित ां प्रश्नावरी

1. स्तन्दूध ै ंककोग'''के क्या ग्रभ हैं? (क) नवजात देिः	
बार भें सुधाय कयता है (ख) उन्हेंफीभायी से फचाता है	
(ग) उन्हें भजफूत औय स्वस्थ होने भें भदद कयता है।	
(घ) उनयोक्त सबी।	
 एन.आई.सी.यू. मेंभतीककनर्शशुओं क्रोअचधकमॉकिदूधकी आवश्यकता होती है? (क) सभम से नहरे 	
फीभाय होना	
(ख) जन्भ के सभम कभ वजन का फछचा	
(ग) ए औय फी दोनों	
(घ) केवर फी	
3. दाताओं। से स्तन का दूध एकत्र करने का सिसे अच्छा तरीका क्या है?	
(क) भैनुअर अमबव्मजक्त (ख) स्तनज्ञोत अमबव्मजक्त	
(ग) वैक्मूभ अमबव्मजक्त (घ) मसरयोज अमबव्मजक्त	
 प्रसव के िाद नहरी िार स्तन का दूध ननकारने का आदिश समय क्या है? 	
(\mathbf{a}_{1}) 30 मभनट के बीतय (\mathbf{w}_{1}) 1 घोटे के	
बीतय $(\mathbf{\eta})$ 2 घोटे के बीतय	
(\mathbf{u}) 3 घोटे के बीतय	
5. एकदाता एक ददन में ककतनी िार स्तन का दूध ननकार सकती है?	
(क) 8 फाय/टदन	
(ख) 9 फाय/टदन	
(ग) 10 फाय/टदन	
(घ) 11 फाय/टदन	

0. भारत म मानव दूध 1000का स दान दूध खरादन का नुरस्कार ककतना ह?	
(क) 50 एभएर के मरए 100 रुनमे	
(ख) 50 एभएर `क मरए 150 रुनमे	
(ग) 50 एभएर के मरए 200 रुनमे	
(घ) 50 एभएर के मरए 250 रुज़मे	
7. ब्रेस्ट र्मल्क ि ैंक में स्तन के दूध क़ो सोग्रदहत करने के र्रए ककस प्रकार के बेटेनर का उनयोग ककया जाता	
है?	
(क) काॊच औय स्टीर	
(ख) ग्रास औय एल्मूमभतनमभ (ग) स्टीर औय	
एल्मूमभतनमभ (घ) ऩॉमरथीन औय एल्मूमभतनमभ	
8. दाता ियन के र्रए कौन सा ऩरी ंण अननवायि है?	
(क) सीयोरॉजजकर स्िीतनॊग	
(ख) नूणा यक्त गणना	
(ग) मरवय पेक्शन टेस्ट	
ब) ककडनी फेक्शन _न यो [ं] ण	
9.स्तन दूध िैंकों में उन्नय्रोग ककये जाने वारे उन्नकरण कौन से हैं? (क) नाश्चयाइजय, डीनफ्रीजय,	
येकफ्रजयेटय, गभाहवाओवन, आटोक्रेव। (ख) स्तनदूधनॊन, जनयेटय, नाश्चयाइजय, डीनफ्रीजय।	
(ग) सक्शन, इरेजक्िकब्रेस्टमभल्कन्रोत, ताश्चयाइजय, येकफ्रजयेटय	
(घ) डीनफ्रीजय, गभाहवाओवन, नाश्चयाइजय, येकफ्रजयेटय।	
10. दूध ननकारने में सुधार के सभी तरीके क्या हैं?	
(क)भामरशकयना, सहराना, टहराना (ख) सहराना, टहराना,	
भामरशकयना (ग) टहराना, भामरशकयना, सहराना	
(ঘ) तनचोड़ना, भामरशकयना, ি ी ॊचना, सहराना	
11 नाश््रिरीकरण नश्ात सॊवधिन के र्रए माॅ के दूध की ककतनी मात्रा आवश्यक है $?$	
(क) 1 से 2 मभ.री	

ISSN:2455-2631	SN:2455-2631 March 2025 IJSDR		ıme 10 İssue
	(ख) 2 से 4 मभ.री		
	(ग) 4 से 6 मभ.री		
	(घ) 6 से 8 मभ.री		
	12. कौन सी माॉ दूधदान करने के र्रए उज्ञयुक्तन हीं है?		
	(क) भाजस्टटटस भें तीव्र सोिभण		
	(ख) रूफेरामा वैयीसेरा सोििमभत		
	(ग) हनीस मसम्पप्रेक्स वामयस से सोिमभत		
	(घ) उनयोक्त सबी		
	13. कौन सीमाॉ िैंकों में दूधदान करने के र्रए उन्नयुक्त हैं?		
	(क) स्वस््म औय सोिभण का कोई ितया नहीं।		
	(ख) सॊिभण की जॊच के मरए यक्त ऩयी ं ण के इछछुक। (ग) अऩनेफछ	चे को दूध	
	वनराने के फाद नमाप्त दूध रें (घ) उनयोक्त सबी।		
	14. जीवाणु सोंदूषण को कम करने के र्रए नहरें ननकारे गए दूध का ककतन	ना दहस्सा त्याग ददया जाता है?	
	(क) 2- 5 मभ.री		
	(ख) 5-10 मभ.री		
	(ग) 15-20 मभ.री		
	(घ) 20-25 मभ.री		

3

ANNEXURE – VIII LIST

OF VALIDATORS

1. Mrs. Jasmine Santha. J.

Principal

Obstetrics And Gynecological Nursing

Charak and Suruchi Institute of Nursing, Lucknow

2. Mrs. Ayman Fatima

Professor

Obstetrics And Gynecological Nursing Bora

Institute of Nursing, Lucknow.

3. Mrs. Sandhya Associate

Professor

Obstetrics and Gynecological Nursing Bora

college of Nursing, Lucknow, U.P.

4. Miss. Nidhi AssIstant

Professor

Obstetrics and Gynecological Nursing St. Mary

College of Nursing, Lucknow

5. Dr. Vaishali Jain

Obstetrician and Gynecologist Vivekananda

Polyclinic, Lucknow

6. Dr. Neeta Bhargava

Pediatrician

Vivekananda Polyclinic, Lucknow.

7. Miss Nandini Amrason

Assistant Professor

Obstetrics and Gynecological Nursing St. Mary

College of Nursing, Lucknow

ANNEXURE -IX CERTIFICATE

BY STATISTICIAN



Date: 27-07-2024

CERTIFICATE OF THE STATISTICIAN

TO WHOM IT MAY CONCERN

This is to certify that Ms. Sukriti Pandey, M.Sc. Nursing II year student of Vivekananda College of Nursing, provided the data related with a research topic- "Assess knowledge regarding Breast Milk Banking among postnatal mothers" The data was duly analyzed at our center and to see the impact of intervention. We have used chi square test; the result obtained are being mailed separately to the candidate.

Place: Lucknow

RESEARCH SOLUTIONS 1-USF, Aarohi Trade Gespe Chowit, Lactmont-216003

LGF-6, Aarohi Trade Bazar, Below UPTEC Computers, Chowk, Lucknow-226003 Phno- 9935872352, 8318659061 pandeymanojkgmu@gmail.com

ANNEXURE - X CERTIFICATE

BY HINDI EDITOR



Phones: (0522) 232 8942, 232 1277, Ext. 467, 466 Fax (91-522) 232 9644

Vivekananda College of Nursing Ramakrishna Mission Sevashrama Vivekananda Puram, Lucknow-226 007 E-mails: rkmvplko@gmail.com rkmsvpcims@gmail.com

शोध सामग्री वैधता प्रमाण पत्र

यह प्रमाणित किया जाता है कि मैं सुकृति पांडे एम.एस.सी. (एन) विवेक्जनंद कॉलेज ऑफ निसेश (अटल विहारी वाजपेयी मेडिकल यूनिवसिटी) लखनऊ की छात्रा हूँ. मैंने 'प्रसर्वोतर माताओं में स्तन दूध बैंकिंग के बारे में ज्ञान का आकलन से संबंधित सामग्री प्रदान की है। सामग्री का विधिवत विश्लेषण किया गया है और उम्मीदवार को अंग्रेजी विधिवत समझाई गई है।

स्थान लाटन १३४

arendlaring नाम डॉ.व.६०। श्रीवाक्त

पदनाम भी थे, पर, 18-11 विकास 21 00 47 9 20 20 100 of (4737

FEMILE

डॉ. वन्दना श्रीवास्तव प्रोफेसर विदी विभाग थी जय नारायण धी.जी. कालेज

ANNEXURE - XI

CERTIFICATE BY ENGLISH EDITOR



Phones: (0522) 232 8942, 232 1277, Ext. 467, 466 Fax (91-522) 232 9644

Vivekananda College of Nursing Ramakrishna Mission Sevashrama Vivekananda Puram, Lucknow-226 007 E-mails: rkmvplko@gmail.com rkmsvpcims@gmail.com

TO WHOM MAY CONCERN

This is to certify that I am Sukriti Pandey M.Sc. (N) student of Vivekananda College Of Nursing (Atal Bihari Vajpayee Medical University) Lucknow, Provided the content related with "Assess knowledge regarding Breast Milk Banking among postnatal mothers"The content was duly analyzed and the English were duly explained to the candidate

Place: Lucknas

Name: Dr S C Hajula

Designation: Prof. Dept of Eng-Shri JNM HG College Signature Lucknow

DR SC HAJELA Prof & Incharge Dept of English Shri JMMPG College Lucknow

LIST OF STATISTICAL FORMULA USED IN STUDY

MEAN: To obtain the mean of the individual observation was first added together and then divided by the number of observations.

$$\mathbf{Mean}\;(\mathbf{x}^{-}) = \underline{\sum}\mathbf{x}$$

STANDARD DEVIATION:

$$s = \sqrt{\sum (X-X^{-})^2}$$
n-1

Chi square test

$$x2 = \sum (observed - expected)2$$
expected

ANNEXURE – XIII

CODING DATA SHEET

SOCIO-

DEMOGRAPHIC

SUBJECT NUMBER	AGE	RELIGION	EDUCATION	OCCUPATION	FAMILY TYPE	NO OF CHILDREN	FAMIL Y INCOM E	EARLIER INFORMATIO N ABOUT BMB		OURCE OF FORMATIO
1	C	В	D	A	В	В	A		В	
2	A	A	В	A	В	A	A		В	
3	В	A	C	A	В	A	В		В	
4	C	A	D	A	A	В	A	A		A
5	В	A	C	A	В	В	A		В	
6	В	A	D	В	В	A	C		В	
7	A	В	C	A	В	A	A		В	
8	A	A	D	A	В	В	В		В	
9	В	В	В	A	В	В	A		В	
10	A	A	В	A	В	В	В		В	
11	A	A	В	A	В	В	В		В	
12	В	A	D	A	A	A	A	A		C
13	A	В	В	A	В	C	В		В	
14	A	A	D	A	В	В	В		В	
15	В	A	D	С	В	A	D		В	
16	A	A	В	A	В	A	A		В	
17	В	A	D	A	A	A	C		В	
18	A	A	В	A	A	В	A		В	
19	C	A	В	A	A	D	В		В	
20	A	В	В	A	A	C	A		В	

ISS	N:2455-2631				M	arch 2025 IJS	DR Volume 10	Issue 3	.		
	21	A	A	В	A	A	В	A		В	
	22	В	A	A	A	В	В	A		В	
	23	A	В	С	A	В	A	В		В	
	24	В	A	D	A	В	В	В		В	
	25	A	A	D	В	В	A	В		В	
	26	В	В	В	A	A	В	A		В	
	27	A	A	С	A	A	A	В		В	
	28	A	A	В	A	В	В	A		В	
	29	A	A	A	A	В	A	A		В	
	30	С	A	D	A	A	В	C	A		С
	31	С	A	D	A	В	В	В		В	
	32	A	В	C	A	В	В	В		В	
	33	В	A	D	A	В	A	В	A		C
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	35	A	A	С	A	В	В	A		В	
	36	В	В	В	A	В	D	A		В	<u> </u>
	37	В	A	D	A	В	A	С		В	<u> </u>
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	39	A	A	D	A	В	A	D	A		C
	40	С	В	D	A	A	В	С		В	<u> </u>
	41	С	A	D	A	A	В	D		В	<u> </u>
	42	A	A	A	A	A	C	A		В	
	43	В	A	D	A	В	A	В		В	
	44	В	A	D	A	В	A	A		В	
	45	A	A	C	A	В	A	В		В	
	46	В	A	C	A	В	C	В		В	
	47	С	A	D	A	В	A	В	A		С
	48	В	A	В	A	В	В	A		В	
	49	С	A	С	A	В	A	A		В	
	50	A	A	В	A	В	A	A		В	

SSN	:2455-2631				M	arch 2025 IJS	DR Volume 10	Issue 3		
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	52	D	В	D	A	В	A	В	В	3
	53	С	A	D	C	В	В	D	В	3
	54	В	A	D	С	A	В	D	В	3
	55	В	A	D	A	В	A	A	В	3
	56	В	A	В	A	В	В	A	В	3
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	59	A	A	В	A	A	В	A	В	3
	60	С	A	D	С	A	A	D	В	3
	61	В	A	D	A	В	A	В	В	3
	62	С	В	В	A	В	A	A	В	3
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	64	A	В	В	A	В	В	A	В	3
	65	C	A	В	A	A	В	A	В	3
	66	В	В	D	A	В	В	В	В	3
	67	В	A	C	A	A	В	A	В	3
	68	В	A	В	A	В	A	A	В	3
	69	A	A	D	A	В	A	A	В	3
	70	A	A	C	A	A	A	В	В	3
	71	В	A	D	A	A	В	В	В	B
	72	В	A	D	В	В	A	D	В	3
	73	A	В	C	A	В	A	В	В	3
	74	A	В	D	A	В	A	В	В	3
	75	A	A	D	A	A	В	В	В	
	76	В	A	В	A	В	В	A	В	1
	77	A	В	A	В	A	В	A	В	8
	78	A	A	В	A	В	В	A	B	.
	79	A	A	С	A	A	A	В	В	
					-					

В

A

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80

В

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SSN:2455-2631				M	arch 2025 IJS	DR Volume 10	Issue 3			
81	A	A	A	A	В	A	В		В	
82	A	A	В	A	A	В	A		В	
83	A	В	A	A	В	C	A		В	
84	С	A	C	A	A	A	В		В	
85	A	A	C	A	В	В	В		В	
86	A	A	C	A	В	A	A		В	
87	В	A	D	A	В	A	C		В	
88	A	A	В	A	В	A	A		В	
89	A	A	В	A	A	A	A		В	
90	A	A	В	A	В	A	A		В	
91	C	A	D	A	A	В	D		В	
92	В	A	D	A	В	A	В	A		C
93	A	В	C	A	В	A	A		В	
94	A	В	В	A	В	A	A		В	
95	C	A	D	C	A	A	C		В	
96	В	A	D	A	В	A	В		В	
97	В	A	D	A	В	В	В		В	
98	A	A	D	A	A	В	В		В	
99	C	A	D	В	A	В	D		В	
100	A	A	В	A	В	A	A		В	
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102	A	A	A	A	A	В	A		В	
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104	В	A	D	A	В	В	В		В	
105	В	A	D	A	В	A	C		В	
106	D	A	D	C	A	В	D	A	C	_
107	В	A	D	A	A	A	В		В	
108	В	В	D	A	В	A	В		В	
109	С	A	В	A	A	В	В		В	

A

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110

В

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В

SSN	2455-2631				M	arch 2025 IJS	DR Volume 10	Issue 3			
	111	A	A	D	A	В	A	В		В	
	112	A	A	В	A	В	В	В		В	
	113	A	A	D	A	В	A	C		В	
	114	В	В	В	A	A	В	A		В	
	115	В	A	В	A	В	A	A		В	
	116	A	A	D	A	В	В	В		В	
	117	В	A	D	A	В	A	A		В	
	118	В	A	D	A	A	A	В		В	
	119	C	A	D	В	A	A	D	A	C	
	120	С	A	A	A	В	C	A		В	
	121	В	В	В	A	A	D	В		В	
	122	A	A	D	A	D	A	В		В	
	123	С	A	D	A	В	В	В		В	
	124	A	A	В	A	В	A	A		В	
	125	В	A	C	A	A	A	В		В	
	126	A	A	A	A	В	A	A		В	
	127	A	A	D	A	В	A	В		В	
	128	В	A	C	A	В	A	A		В	
	129	С	A	D	D	В	В	В		В	
	130	A	В	В	A	В	A	В		В	
	131	В	A	D	A	В	A	C		В	
	132	A	A	C	A	A	C	В		В	
	133	A	A	В	A	В	A	В		В	
ĺ	134	A	A	D	A	A	A	В		В	
	135	С	A	В	A	В	A	A		В	
	136	A	A	В	A	В	A	В		В	
	137	A	A	D	A	В	В	В		В	
	138	В	A	D	A	В	A	A		В	
	139	В	A	D	A	В	A	С		В	

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140

SSN:2455-2631				M	arch 2025 IJS	DR Volume 10	Issue 3			
141	C	A	D	A	A	В	D	A		C
142	В	A	D	A	В	A	В	A		C
143	В	A	D	A	В	A	С		В	
144	В	A	D	В	A	A	C		В	
145	A	A	C	A	В	В	A		В	
146	A	A	D	A	В	A	A		В	
147	В	A	D	A	A	В	A		В	
148	A	A	В	A	В	A	A		В	
149	В	В	D	A	A	A	D		В	
150	A	A	В	A	В	В	A		В	
151	A	A	D	A	В	A	В		В	
152	A	В	В	A	В	A	A		В	
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157	В	A	D	A	A	A	В		В	
158	A	A	D	A	В	A	В		В	<u> </u>
159	A	В	В	A	В	C	A		В	
160	В	A	D	A	A	В	В		В	<u> </u>
161	A	A	В	A	В	A	A		В	
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163	A	A	A	A	В	A	A		В	
164	A	A	В	A	A	A	В		В	
165	A	A	D	A	В	В	C		В	
166	A	A	A	A	В	A	В		В	
167	В	A	D	A	В	В	В		В	
168	C	A	D	С	A	С	С	A		С
169	В	A	D	A	В	В			В	

A

A

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В

В

170

A

A

SN:2455-2631				M	arch 2025 IJS	DR Volume 10	Issue 3			
171	В	A	D	A	В	В	A		В	
172	A	A	C	С	A	В	В		В	
173	В	A	D	A	В	A	A		В	
174	A	A	D	A	В	A	В		В	
175	A	A	C	A	A	В	В		В	
176	D	A	C	В	A	A	В	A		C
177	A	В	В	A	В	A	В		В	
178	В	A	D	A	A	В	В	A		C
179	C	A	D	A	В	A	В		В	
180	A	A	В	A	A	A	A		В	
181	В	A	D	С	В	A	D		В	
182	В	A	D	A	В	A	C		В	
183	В	A	D	A	A	В	C		В	
184	В	A	D	A	В	A	A		В	
185	В	В	D	A	В	A	D		В	
186	A	A	В	A	A	В	A		В	
187	C	A	D	A	В	В	В		В	
188	C	A	A	A	В	D	A		В	<u> </u>
189	A	A	В	A	В	A	A		В	l
190	A	A	D	A	В	A	В		В	
191	A	A	D	A	В	В	В		В	
192	A	A	В	A	В	В	A		В	
193	A	A	В	A	В	A	A		В	
194	В	В	D	A	В	A	C	A		C
195	A	В	В	A	A	В	A		В	
196	В	A	D	A	A	A	C		В	
197	C	A	D	A	В	A	A		В	
198	A	A	D	A	В	A	В		В	
199	В	A	D	A	В	В	В		В	

В

D

A

В

D

200

A

A

ANNEXURE – XIIII MASTER DATA SHEET

SUBJECT NUMBER															
	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Q.7	Q.8	Q.9	Q.10	Q.11	Q.12	Q.13	Q.14	TOTAL
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98	1	0	0	0	0	0	1	0	0	1	1	1	1		1	7

99																
101				1				1							1	
102	100	0	0	1	1	1	0	1	0	0	0	1	1	0	1	7
103	101	1	1	1	0	0	0	1	0	0	1	1	1	1	1	9
104	102	0	0	0	0	0	0	0	0	0	1	1	0	0	1	3
105 1 1 1 0 0 0 1 0 0 1 0 9 9 1 0 1 1 0 0 1 1	103	1	1	1	1	1	0	1	0	0	1	0	1	1	1	4
106	104	1	1	1	1	1	0	1	0	0	1	0	1	1	1	11
107 1 1 1 0 0 1 0 1 1 1 1 1 1 1 0 9 108 0 0 1 0 1 0 1 0 0 0 1 1 1 1 6 109 0 0 0 0 1 0 1 0 0 0 1 1 1 6 110 0 0 0 0 0 0 1 0 0 0 1 5 110 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 1 3 11 1 <t< td=""><td>105</td><td>1</td><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td><td>1</td><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>9</td></t<>	105	1	1	1	0	0	0	1	0	0	1	1	1	1	1	9
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109 0 0 0 1 0 1 0 0 0 1 1 0 1 5 110 0 0 0 0 0 0 0 1 0 0 0 1 0 0 1 0 0 0 1 0 0 1 <td>107</td> <td>1</td> <td>1</td> <td>1</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>0</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>0</td> <td>9</td>	107	1	1	1	0	0	0	1	0	1	1	1	1	1	0	9
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	112	0	0	0	0	0	0	1	0	0	0	1	0	0	1	3
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116 1 1 1 0 0 1 0 0 1	114	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
117 1 1 0 0 1 0 0 0 0 1	115	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
118 1 1 1 1 0 0 0 1	116	1	1	1	1	0	0	1	0	0	1	1	1	1	1	10
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121 0 0 1 0 0 0 0 0 0 0 0 1 3 122 1 1 0 1 0 0 1 9 123 0 1 2 124 0 0 0 0 0 0 1 0 0 1 1 0 0 1 4	119	1	1	1	1	1	0	1	1	1	1	1	1	1	1	14
122 1 1 0 1 0 0 1 2 124 0 0 0 0 0 1 0 0 0 0 1 4	120	0	0	0	0	0	0	1	0	0	0	1	0	0	1	3
123 0 0 0 0 0 1 0 0 0 0 0 1 2 124 0 0 0 0 1 0 0 1 1 0 0 1 4	121	0	0	1	0	0	0	1	0	0	0	0	0	0	1	3
123 0 0 0 0 0 1 0 0 0 0 0 1 2 124 0 0 0 0 1 0 0 1 1 0 0 1 4	122	1	1	0	1	0	0	1	0	0	1	1	1	1	1	9
124 0 0 0 0 0 1 0 0 1 1 4		0		0		0	0	1	0	0	0	0			1	
		0	0	0	0	0	0		0	0	1	1	0	0	1	
125 0 0 0 0 0 0 1 0 0 1 1	125	0	0	0	0	0	0	1	0	0	1	1	0	0	1	4
126 0 0 0 0 0 0 0 0 0 1 0 1 3	126	0	0	0	0	0	0	0	0	0	1	0	1	0	1	3
127 0 1 1 1 1 0 1 0 0 0 1 0 1 7		0		1			0									

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157	0	0	0	1	0	0	0	0	0	0	1	0	1	0	3
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404		_	_	_	_		_		_			_			
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