

## A Study to assess the Knowledge Regarding Human Milk Banking among Women in Selected Hospital at Kottayam District

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### ABSTRACT

A descriptive study was conducted to assess the knowledge regarding human milk banking among women in selected hospital at Kottayam district with a view to develop an information leaflet. Convenient sampling technique was used to select samples from prenatal and postnatal mother's and mothers of under five children. The study sample consists of 30 parents who came to the out patient department and by standers of admitted child who got admitted in wards of Little Lourdes Mission hospital. Data was collected using structured questionnaire to assess the knowledge regarding Human Milk Bank among women.

The result showed that among 30 samples 22 (73.3%) women had only average knowledge regarding human milk bank. Only 8 (26.66%) had good knowledge regarding human milk bank and nobody had poor knowledge regarding human milk bank. The study findings revealed that there are no significant association between knowledge regarding human milk bank and demographic variables such as age and education. There is association between knowledge regarding human milk bank and occupation.

**Keywords:** Human Milk Banking; Post-mature infants; Neonatal.

### INTRODUCTION

An infant is the most valuable being on the earth and it is this vulnerability that makes it so endearing. A human baby, with its large head and tiny body is a wonderful creation. A neonate is a baby who is 4 weeks old or younger they are also called as a newborn. The term applies to premature, mature

and post-mature infants. The neonatal period is the first 4 weeks of a child's life and It is a time when changes are very rapid. During this period the child is at highest risk of death. It is therefore crucial that appropriate feeding and care are provided during this period, both to improve child's chances of survival and lay foundations for a healthy life.

Breast milk is whole some food for the baby, breast feeding is the most effective way to provide baby with complete nutrition. Breast feeding is important as it supplies all the necessary nutrients in proper proportion. It protects against allergies, infections, sickness, diseases like diabetes and cancer. Breast milk is easily digested that the baby may not have constipation, diarrhea or stomach upset. Breast feeding protects infants against infections mainly via secretory IgA antibodies and other various bioactive factors.

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Human milk banks are literally the life line for many preterm and low birth weight been born in our country. The importance of these human milk banks can be gauged by the fact that almost all neonatal units in developed countries are serviced by a milk bank to cater to the needs of their premature babies.

### **Need for Research Study**

A neonate or new born infant is a child under 28 days of age. The neonatal period is the period of most dramatic physiologic changes that occur during human life. It's a time of rapid change and development where patterns for infancy like feeding and bonding or developed. The child gets nutrition through breast milk. Breast feeding helps in providing immunity and formation of an effective mother child bonding. Breast feeding helps the child to fight against allergies, infection etc. The number of infants born preterm including extremely premature babies rising worldwide, particularly in low and middle-income countries which challenge neonatologists and milk bank for the provision of the most adequate nutrition for successful infant growth and development.

Having a human milk bank in a health facility increases awareness about breast feeding among families and the community. Human milk is recognized for it's numerous benefits including inducing tolerance to allergens, providing passive immunization, improving lipid profile's and controlling BP. Providing pasteurized breast milk from the bank to low birth weight premature babies, infants whose mother's are unable to provide sufficient milk and babies separated from mother's will reduce the risk of infections and boost their immunity. At risk infants will benefits from breast milk nutrients in case the mothers is unable to provide the breast milk to the child. Pasteurized donor milk from a healthy mother should be the first consideration for the supplementation.

### **Problem Statement**

A study to assess the knowledge regarding Human Milk Banking among women in selected hospital at Kottayam district with a view to develop an information leaflet.

### **Objectives**

- To assess the knowledge regarding human milk banking among women in selected hospital at Kottayam district.
- To find out the association between knowledge regarding human milk banking among women and selected demographic

variables.

- To prepare an information leaflet regarding human milk bank.

### **Operational Definition**

Operational definition is defined as a concept or variable in item of the process by which it is to be measured.

#### *Assess*

In this study, it refers to the activity to estimate the knowledge regarding human milk banking among women using knowledge questionnaires.

#### *Knowledge*

In this study, it refers to the correct responses of the women regarding human milk banking against the prepared questionnaire.

#### *Human Milk Banking*

In this study, it refers to a service that collects, screens, processes and dispenses breast milk donated by lactating women which is used to feed pre-mature babies and other infants who cannot be breast fed directly.

#### *Women*

In this study, it refers to pre-natal and post-natal mothers & mothers of under five children who are attending paediatric or gynaecology OPD, by standers of admitted child or admitted in wards of Little Lourdes Mission hospital.

#### *Assumption*

- Women may have in adequate knowledge regarding human milk banking.
- Knowledge of human milk banking among women may be useful to prevent neonatal death and under five mortality and morbidity due to low birth weight.

#### *Hypothesis*

H<sub>1</sub>: There is significant association between the level of knowledge regarding human milk banking among women with selected demographical variables.

#### *Delimitation*

- The study is limited to 30 samples.
- The setting of study is limited to selected hospital at Kottayam district.
- The study is limited to assessment of knowledge.

### *Projected Outcome*

The study is aimed to assess the existing knowledge of women regarding human milk banking and provide the information through leaflet.

### **Review of Literature**

A study was conducted to assess knowledge about human milk and milk banking. Quantitative non experimental descriptive research approach was used to assess the knowledge of nurses about human milk and its banking that was conducted in a tertiary level hospital in Nepal. Knowledge was assessed using self structured questionnaire. Data was analyzed by descriptive inferential statistical methods. The result of the study shows that majority of nurses had adequate knowledge about human milk and milk banking.

## **METHODOLOGY**

### *Research design*

The research design of the study is non experimental descriptive research design.

### *Setting of the study*

The setting selected for the study is the pediatric OPD, gynaec OPD, pediatric ward and gynaec wards of Little Lourdes Mission Hospital Kidangoor.

### *Population*

Population of the study includes all prenatal and postnatal mothers and mothers of under 5 children who are in the age group of 25-40 years.

### *Sample*

Sample selected for the study are the prenatal and postnatal mothers and mothers of under 5 children attending the pediatric OPD, gynaec OPD, pediatric ward and gynaec wards who fulfills the inclusion criteria in Little Lourdes Mission Hospital, Kidangoor.

### *Sample size*

The sample size selected for the present study was 30.

### *Sampling technique*

Sampling technique used for the present study is purposive sampling technique.

## **Criteria for sample selection**

### **Inclusion criteria**

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

The mothers:

- Who are willing to participate.
- Who are available at the time of data collection.

### *Exclusion criteria*

Exclusion criterions for the present study were

Mothers who are:

- Mothers who are sample of any other study.
- Mentally challenged

### *Method of data collection*

Data collection is the process of collecting the data needed for the study.

### **Instrument**

The instrument used for this study was structured knowledge questionnaire developed after thorough reviewing various literature and articles pertaining consultation and discussion with experts.

### **Description of the Tool**

It consisting of 2 sections:

#### **Section A:** Demographic data

It consist of questions related to demographic variables such as age, education, occupation, area of residence, number of children, previous knowledge about human milk banking.

#### **Section B:** Structured knowledge questionnaire on human milk bank

It consist of 27 multiple choice question to assess the knowledge regarding human milk banking among women in Little Lourdes Mission Hospital, at Kottayam district with a view to develop an information leaflet. Each correct response was given a score of 1 and the maximum score is 27.

#### *Score Key*

1-9 = Poor

10-18 = Average

19-27 = Good

### Analysis and interpretation of data

**Table 1:** Frequency and percentage distribution of sample according to the demographic variable

Demographic variables	Frequency	Percentage
<b>Age</b>		
25-30	17	56.6%
31-35	9	30%
36-40	4	13.3%
Total	30	100%
<b>Education</b>		
Lower primary	1	3.3%
Upper primary	0	0
High school	1	3.3%
Graduates	28	93.3%
Total	30	99.9%
<b>Occupation</b>		
Employed	18	60%
Unemployed	12	40%
Total	30	100
<b>Area of residence</b>		
Rural	20	66.6%
Urban	10	33.3%
Total	30	99.9%

**Table 2:** Frequency and percentage distribution of sample according to the level of knowledge of women regarding human milk bank

Knowledge level	Frequency	percentage
Poor	0	0
Average	22	73.33%
Good	8	26.66%

### Association between knowledge score with selected demographic variables

This section deals with the association of selected demographic variables such as age, education and occupation.

**Table 3:** Association between knowledge score with selected demographic variables

Demographical variables	Chi square value	df	Significance
Age	1.615	2	No association
Education	0.77	1	No association
Occupation	7.268	1	Association

## DISCUSSION

The present study was under taken to assess the level of knowledge regarding human milk bank among women. The following section deals with discussion of the study under following headings:

- Finding related to the level of knowledge regarding human milk banking among women; The present study finding shows that among 30 samples 73.3% have average knowledge level, 26.6% have good knowledge level and nobody has poor knowledge level.
- Findings related to the association between selected demographic variables and level of knowledge regarding human milk banking among women;

The present study findings shows that there is association between occupation and level of knowledge regarding human milk banking among women with  $\chi^2$  value is less than (7.268) tabulated value (3.84) at the 0.05 level of significance. There is no association between age and education with level of knowledge regarding human milk banking among women.

### Major findings

*Frequency and percentage distribution of sample according to demographic data:*

Among 30 sample, 17(56.6%) samples belongs to age group of 25-30 years, 9(30%) sample belongs to 31-35 years of 4(13.3%) samples were in the age group of 36-40 years.

Among 30 sample, 28(93.3%) samples were graduated, 1(3.3%) sample was having lower primary education, 1(3.3%) sample was having high school education and nobody were having upper primary education.

Among 30 sample, 18(60%) sample were employed and 12(40%) were unemployed.

Among 30 sample, 20 (66.6%) sample are from rural area and 10 (33.3%) sample from urban area.

Among 30 sample, 16 (53.3%) sample were having knowledge regarding human milk banking and 14 (46.6%) were not having knowledge regarding human milk bank.

Among 16 sample, 6 (37.5%) gained knowledge from social media and 10 (62.5%) gained knowledge from health workers.

Among 30 sample, 2 (6.6%) sample were having no children, 9 (30%) sample were having one child, 16 (53.3%) were having two children, 3 (10%) were having three or more children.

### *Frequency and percentage distribution of sample according to level of knowledge*

Among 30 sample, 8 (26.66%) sample were having good knowledge regarding human milk banking, 22 (73.33%) were had average knowledge and nobody having poor knowledge.

### *Association between knowledge score with selected demographic variables*

There is no significant association between knowledge regarding human milk banking and selected demographic variables such as age and education at 0.05 level of significant and table value.

There is association between knowledge regarding human milk bank and occupation.

### **Implication**

#### *Nursing administration*

The nurse administrator plays an important role in the dissemination and utilization of research findings. The nurse leader should take initiative in conducting various educational classes, in order Nursing practice to update the knowledge of nursing staff regarding life style modification for prevention of hypertension.

#### *Nursing practice*

Nursing practice can improve quality of care given by nurses. As a vital part of health team, nurse can do greater contribution in improving women's knowledge regarding human milk bank. As proper management, it will contribute to decrease the incidence of malnutrition in children. So the nurse perform a key role in providing adequate and accurate information regarding human milk bank.

#### *Nursing education*

Awareness programs can be conducted and organized to improve knowledge of students and public so that it can contribute to better growth and development of children, thereby eradicate malnutrition.

#### *Nursing research*

Nursing research can make changes in the field of nursing, light to future researchers.

### **CONCLUSION**

Among 30 sample, 17 (56.6%) belongs to age group between 25-30 years. Among 30 sample, 28 (93.3%) sample were having graduation. Among 30 sample, 18 (60%) were employed. Among 30 sample, 20 (66.6%) sample were from rural area. Among 30 sample, 16 (53.3%) were having two children. Among 30 sample, 16 (53.3%) sample were having previous knowledge regarding human milk bank. Among 30 sample, 22 (73.33%) sample were having average knowledge. There was no significant association between knowledge regarding human milk bank and demographic variables such as age and education. There is association between knowledge regarding human milk bank and occupation.

### **Recommendation**

- As similar study can be conducted with a large sample so that findings can be generalized.
- A similar study can be conducted on women to assess the level of knowledge regarding human milk banking among women between 25 - 40 years.

### **Limitation**

- The study is limited to 30 samples.
- The setting of study is limited to selected hospital at Kottayam district.
- The study is limited to assessment of knowledge.

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