



KNOWLEDGE AND PERCEPTION ON HUMAN BREAST MILK BANKING AMONG FEMALE STAFF NURSES: A DESCRIPTIVE CORRELATIONAL STUDY

Nursing

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ABSTRACT

Background: The use of human milk provides substantial short- and long-term benefits. With the establishment of the first donor human milk bank in Singapore, high-risk preterm and critically ill infants whose mothers have an inadequate milk supply can have access to pasteurized donor human milk. **Materials and Methods:** A self-administered anonymous questionnaire was conducted among nurses working in a private multi-specialty hospital in the state of Kerala. The questionnaire was divided into three main sections, namely, demographic proforma, knowledge assessment, and perception towards human breast milk banking. The aims of the survey were to assess the knowledge, and perceptions of nurse on breast milk donation and milk bank, and to identify any differing perceptions among different nurses. Knowledge questionnaire consist of fifteen questions and perception scale had ten statements. Data confidentiality was ensured and written informed consent was obtained from study subjects. **Results:** A total of 100 nurses from educational and departmental backgrounds participated in this study. Findings show that majority of subjects (72%) are having average knowledge, 15% of subjects are having poor knowledge and 13% are having good knowledge regarding breast milk banking. Regarding perception towards breast milk banking 100% subjects have positive perception towards breast milk banking. There is a mild positive correlation between knowledge and perception towards breast milk banking among nurses. **Conclusion:** Donor human milk banking is well received and supported by health-care workers. Knowledge of milk donation, screening, pasteurization, and storage can be improved on. Further evaluation is required to determine the underlying concerns that different ethnic groups may have.

KEYWORDS

Breast milk banking, Nurses, Knowledge, perception, Neonatology.

INTRODUCTION

Breastfeeding has been shown to be good for both babies and mothers in many ways. [1] The World Health Organization says that babies should only be fed breast milk for the first six months of their lives. [2] When the mother's own milk isn't available or there's not enough of it, even with a lot of help, donor milk is the next best thing. [3] There is more and more evidence that giving sick or premature babies human milk has many benefits, such as lowering the risk of infection, necrotizing enterocolitis, and death while improving their brain development. [4] Long-term, it also makes it less likely that a child will become overweight or get diabetes. [5]

In India, not enough women breastfeed their babies. In 2011, the National Breastfeeding Survey found that less than half of babies were being breastfed at 2 months, and by 6 months, only 21.1% of babies were still being breastfed. [6] With the start of Singapore's first donor human milk bank programme, babies who are born early, have a very low birth weight, or are sick and whose mothers don't have enough milk can get pasteurised donor human milk. An established milk bank is also safer and better regulated than the informal platforms that used to be used to share milk.

Nurses are very important to the success of this new project. Studies have shown that health care workers who know about breastfeeding and have a positive attitude about it encourage mothers to keep breastfeeding and support breast milk donation. [7] But there isn't much written about how health care workers feel about human milk banks right now.

In the United States, Europe, and Australia, there are a number of well-run milk banks. Asian countries, on the other hand, don't know about this service as much. India is a multiracial and multiethnic society, so different groups of people may have different ideas about this issue. Some ethnic groups may be worried about or against the milk bank programme, which could be a problem for getting it started.

MATERIALS AND METHODS

The aims of the survey were to assess the knowledge, and perceptions of nurse on breast milk donation and milk bank, and to identify any differing perceptions among different nurses. A self-administered anonymous questionnaire was conducted among nurses working in a private multi-specialty hospital in the state of Kerala. The questionnaire was divided into three main sections, namely, demographic proforma, knowledge assessment, and perception towards human breast milk banking. Knowledge questionnaire consist of fifteen questions and perception scale had ten statements. Data

confidentiality was ensured and written informed consent was obtained from study subjects.

RESULTS

A. Socio Demographic Data Of Study Subjects

Mean age of study subjects was 34.6 with a SD of 7.56

Table 1: Frequency and percentage distribution of subjects based on socio demographic variables.

Variable		Frequency	Percentage
Marital status	Married	87	87.0
	Unmarried	13	13.0
Education	GNM	67	67.0
	PPBSC	3	3.0
	BSc	29	29.0
	MSc	1	1.0
Department	Pediatric Ward	10	10.0
	NICU	19	19.0
	OBG	9	9.0
	ER	13	13.0
	MS wards	49	49.0
Experience	Less than 1 year	5	5.0
	1-3 Years	17	17.0
	4-6 Years	13	13.0
	7-10 Years	21	21.0
	More than 10 years	44	44.0
Previous knowledge about breast milk banking	Yes	54	54.0
	No	46	46.0
Opinion of need for breast milk banking	Yes	89	89.0
	No	11	11.0

B. Knowledge And Perception About Breast Milk Banking

Table 2: Knowledge, Perception Scores And Correlation Coefficient

Knowledge	Category	Frequency	Percentage
	Poor	15	15.0
	Average	72	72.0
	Good	13	13.0
Mean score	07.8±2.4		
Perception	Category	Frequency	Percentage
	Positive	100	100.0
Mean Score	25.7±3.3		
Correlation (Knowledge and perception)	Karl Pearson $r=2.86$		

Table 2 reveals that majority of subjects (72%) are having average knowledge, 15% of subjects are having poor knowledge and 13% are having good knowledge regarding breast milk banking. Regarding perception towards breast milk banking 100% subjects have positive perception towards breast milk banking. There is a mild positive correlation between knowledge and perception towards breast milk banking among nurses.

DISCUSSION

This study helps us learn more about the difficulties of starting and running a human milk bank in India. Findings show that majority of subjects (72%) are having average knowledge, 15% of subjects are having poor knowledge and 13% are having good knowledge regarding breast milk banking. Regarding perception towards breast milk banking 100% subjects have positive perception towards breast milk banking. There is a mild positive correlation between knowledge and perception towards breast milk banking among nurses.

A survey was conducted to assess the knowledge, attitudes, and perceptions of health-care workers on breast milk donation and milk bank. A total of 38 doctors and 140 nurses from various racial and religious backgrounds participated in this survey. More than 50% of respondents know the benefits of breast milk over formula milk; however, knowledge of the milk donation process and the effect of pasteurization on donated breast milk can be improved on. In the opinion section, 78.7% of survey respondents were supportive of the human milk bank. Sixty-eight (38.2%) respondents felt that recipients should receive milk from donors of the same race and ethnicity, whereas 56 (31.5%) disagreed and 53 (30%) were neutral. They concluded that donor human milk banking is well received and supported by health-care workers. Knowledge of milk donation, screening, pasteurization, and storage can be improved on^[8].

Another quantitative, non-experimental descriptive research study was conducted to assess the knowledge of nurses about human milk and its banking that was conducted in a tertiary level hospital in Kathmandu Nepal. Knowledge was assessed using self-structured questionnaire. Data was analyzed by descriptive and inferential statistical methods. Study depicts that majority of nurses have adequate knowledge about human milk and milk banking. Study concluded that despite the satisfactory knowledge of nurses, there should be provision of in service training and symposium at regular interval to keep update knowledge and efficient working^[9].

Most people who took the survey know that breast milk has health benefits and are in favour of the human milk bank^[10]. Different ways of teaching about the human milk bank and how it works need to be used to help people learn more. People will only become more aware of this issue if health care workers are well-informed about it. This will make sure that this new initiative will continue to be successful. Responses to the question of whether donors and recipients should be of the same race and religion were mixed, and more research is needed to figure out what different ethnic groups are worried about and why^[11,12].

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