



A STUDY TO ASSESS THE KNOWLEDGE AND ATTITUDE REGARDING HUMAN MILK BANKING AMONG FINAL YEAR NURSING STUDENTS OF SELECTED NURSING COLLEGE, MANGALORE

Nursing

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ABSTRACT

Human milk banking has been serving the golden purpose of reaching out to the sick or needed babies by supplying the breast milk. This study was conducted aiming at student nurses understanding and attitude towards human milk banking. A cross sectional descriptive study design was adopted to assess the knowledge of 126 final year GNM and BSc nursing students selected by convenient sampling and the the information required were collected using socio-demographic sheet; knowledge ascertained by self- structured questionnaire and attitude by Likert scale. Study findings revealed that majority of nursing students 61.10% had average, 36.50% poor and only 2.40% good knowledge regarding human milk banking whereas 55.6% had satisfactory and 44.4% good attitude towards the human milk banking. There was a significant correlation found between the nursing students' knowledge and attitude towards human milk banking ($p1.68008e-10$). There's need for further improvement in knowledge of nursing students by training and hands on experience in the functioning of human milk banking.

KEYWORDS

Knowledge, attitude, Human milk banking, Nursing Student

INTRODUCTION

Human milk is natural, economic and easily available conducive start to life. It is specific to species and its benefits are universally accepted in regards to optimum growth and development. It is equally beneficial for all newborn babies, importantly for very low birth weight and extremely low birth weight babies and ameliorates neuro-cognitive development.¹

When a mother, for some reason, is unable to feed her infant directly; her breast milk should be expressed and fed to the infant. If mother's own milk is unavailable or insufficient, the next best option is to use pasteurized donor human milk (PDHM). India faces its own unique challenges, having the highest number of low-birth- weight babies, and significant mortality and morbidity in very low birth weight (VLBW) population. In our country the burden of low-birth-weight babies in various hospitals is about 20%with significant mortality and morbidities.²

A human milk bank or breast milk bank is a service which collects, screens, processes, and dispenses by prescription human milk donated by nursing mothers who are not biologically related to the recipient infant. Human milk banks offer a solution to the mothers that cannot supply their own breast milk to their child, for reasons such as a baby being at risk of getting diseases and infections from a mother with certain diseases, or when a child is hospitalized at birth due to very low birth weight (and thus at risk for conditions such as necrotizing enterocolitis), and the mother cannot provide her own milk.³

A study conducted by Taksande et al (2024) among medical and paramedical students found that 43.72% would not mind feeding in future the baby with human milk banking milk. On the other hand, the remaining 56.28% expressed reluctance as they believed 27.39% cited concerns about disease transmission, while 17.84% held the belief that breast milk from other women is nutritionally inferior to that of one's lactating mother.⁴

Final year nursing students are the future staff nurses who can take up this topic seriously and teach mothers. This study was aimed to understand the student's existing knowledge and attitude regarding breast milk banking.

METHODS

Once ethical clearance was obtained, the study was carried out over 2 months from November 2023. The study included all the final year nursing students pursuing either GNM or Bachelor of Nursing selected by purposive sampling technique and 126 enrolled, and the sample size was calculated by the coherent formula. The tools for data collection included -baseline proforma, knowledge questionnaire and attitude scale which were subjected to validation, reliability and pilot study was conducted and found to be feasible. The data was collected from the participant after obtaining the informed consent. The Knowledge

was assessed using a structured questionnaire with 30 multiple choice questions and 1 denotes the correct answer 0 is to wrong answer of the questions and was interpreted as poor (below 50%), 51-75% interpreted as satisfactory and, above 76% interpreted as good. The attitude was evaluated using 10 items where the "agree" answers were coded as 1 and "disagree" answers as 0. The collected data was spread over master sheet and analyzed using descriptive and inferential statistics.

RESULTS

The baseline proforma of the participants showed that the average age of the subjects was 21.5 ± 1.103 , 40(31.7%) were final year GNM and remaining were BSc Nursing students 86 (68.3%)., More than three quarters 107(84.9%) were female and 19 (15.1%) males. Previous knowledge reveals that 99(78.5%) had previous knowledge and 27(21.4%) did not have previous knowledge on human milk banking. Distribution of the subject according to their subject of information about shows that 48(48.6%) were got information from the mass media, 24(24.2%) of the subject got information by prior NICU clinical experience 15(15.2%) from health care providers, whereas 9(9%) from relatives/friends/peers.

Section 2: Nursing student's knowledge regarding human milk banking

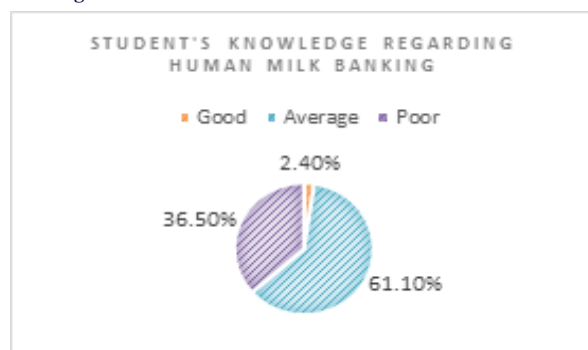


Fig 1 shows that majority 61.5% of the subject had average and 36.5% had poor and only 2.40% subject had good knowledge regarding Human milk banking. The average score of participants were 16.30 ± 3.94 .

Section 3: Nursing student's attitude towards human milk banking

Attitude score	Frequency	Percentage (%)
Poor	0	0
Satisfactory	70	55.6
Good	56	44.4

The data on table 1 shows that 55.6% satisfactory and 44.4% has good and none of them had poor attitude towards human milk banking.

Section 4: Correlation between knowledge and attitude towards human milk banking

The results showed strong positive correlation between student's knowledge about Human milk banking and their attitude towards it. Students with a higher knowledge of Human milk banking had more likely positive attitude towards its ($r=0.5304$ $p<0.001$).

Section 5: Association between knowledge and attitude and baseline variables

There was a significant association between knowledge scores on human milk banking and age of the participants (p 0.013) and none with the rest of the variables. that there was no statistically significance with attitude scores and the selected baseline variables at 0.05 level of significance.

DISCUSSION

The results of the current study demonstrated a significant positive link between student's knowledge and attitude regarding human milk banking. Very less students 2.4% had good, 61.1% average, and 36.5% had poor knowledge regarding human milk banking. The majority of students had satisfactory (55.6%) and (44.4%) had good attitudes and the data indicates that nursing students who knew more about human milk banking were more likely to feel positive about it ($p < 0.001$). The above-mentioned results were consistent with a similar study carried out by Renuka (2018)⁵, Paul.A (2023)⁶ which evaluated staff nurse's attitudes and understanding about storing breast milk for infants. Results showed that staff nurses knew 15% poorly, 66.66% averagely, and 18.37% good knowledge. The majority of students (87.2%) had a positive attitude, whereas 11.8% had a neutral view.⁹ Paul. A found that 22 (73.3%) postpartum mothers had only average knowledge and only 8 mothers had excellent knowledge of human milk banks. The study's conclusions showed that demographic factors like age and education do not significantly correlate with awareness about human milk banks.⁶

The present study found no significant association between attitude scores and the baseline variables. The study findings were congruent with study conducted by Naik PK et al (2018) which evaluated the postnatal mother's attitudes and level of knowledge on the donation of human milk where similar findings were obtained.⁷

CONCLUSION

It is concluded that the findings indicate that students who possess greater knowledge about human milk banking are more inclined to view the practice favorably. Regular conferences, workshops, and seminars are necessary to advance our understanding of human milk banking. In order to better assist moms, students might gain from further educational interventions regarding the procedures involved in human milk banking. Additional research of this kind may open the door to the establishment of a human milk bank, which will benefit underprivileged infants. It may also guide the creation of educational interventions that encourage nursing students to adopt positive attitudes and actions.

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