

Research Article

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## KNOWLEDGE AND ATTITUDE TOWARDS EXPRESSED BREAST MILK AMONG WORKING MOTHERS IN HARARI REGIONAL STATE, ETHIOPIA, 2021

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### Abstract

**Background:** World health organization (WHO) rules in the beginning six month the child should be given breast milk only, so mothers coming back to work should have a good knowledge about appropriate expression of breast milk. The main goal of the research was to determine knowledge and attitude toward expressed breast milk among working mothers in Harari region, Ethiopia, 2021

**Methods:** A cross-sectional study was done on 385 employed mothers for analysis of data SPSS 22 used.

**Results:** Over all knowledge and attitude about expressed breast milk were 36% and 44% respectively.

**Conclusion:** the study showed there was knowledge gap in the expressing and storing of breast milk. More exertion is essential to be done by the health professionals in educating mothers on way of expression, storing and timings of storage of expressed breast milk of breast.

**Keywords:** Expressed, breast milk, knowledge, attitude

## INTRODUCTION

The WHO recommends that a child be given only breast milk for the first six months of life (1, 2), with the exception of medication, vitamins, and minerals, and that this has benefits for both mothers and babies now and in the future. Breastfeeding has many benefits for babies, including a lower risk of communicable diseases throughout infancy and a positive impact on intellectual and motor development(3), but it also has many drawbacks, such as breast inflammation, insufficient milk supply, employed mothers, neonates admitted to neonatal intensive care units, and so on (2).

For many mothers, expression of milk, or taking milk from a mother's breast without a baby's mouth at her nipple, is a common part of breastfeeding. According to a study, 85 percent of breastfeeding women release milk before their baby becomes four months old. (4)

Expressed breast milk has been shown to be helpful in the beginning and continuation of breastfeeding. Expression of milk, whether by hand or with a pump, may help women overcome some barriers to successful nursing and, as a result, lengthen the breastfeeding time. (5)

It's a big difference between breast milk and expressed breast milk when it comes to the value of breast feeding. (6) It negates a few of the nutritional modules' advantages; for babies, human milk nursing is preferable to infant formula. (7) Breast milk expression is widely used in developed countries such as the United States. (8)) But in developing countries like India and Kenya the using breast milk expression is still low, in some illustrations, it not acceptable socially (9.10). (9.10).

The fundamental reason for this study was a lack of information regarding breast milk expression in the study area, thus the goal was to analyze mothers' knowledge and attitudes about breast milk expression.

## METHOD

### Design and study area

A cross-sectional descriptive study was conducted among employed mothers in Harari region, which is located in the eastern part of the country and is 525 kilometers away from the capital city of Addis Ababa.

### Sampling and Population

Working mothers in the governmental or non-governmental sectors with a baby under the age of six months who presented to well-baby clinics made up the study population. The sample frame was designed by mothers accompanying their babies to hospitals during the research period. The sample size P value of 65 percent was used for scheming, which was discovered in a comparable study conducted in Kenya, and after adding a 10% non-respondent rate, the final sample size was 385.

### Procedures and Tools for Data Collection

Questionnaire was used to collect data. Knowledge was assessed using contextualized Yes/No questions. Attitude was measured using a five-point Likert Scale. Each mother was interviewed face to face, and the data collectors completed a questionnaire. Exit interviews with women who met the inclusion criteria were used to collect data.

### Analyze and Process Data

SPSS version 22 was used to export the data. It had previously been entered into Epi-info version 3.5.3. The data was presented in written, table, and graph form after a descriptive analysis.

### Ethical considerations

Ethical approval for this study was gotten from Harar Health Science College Ethics



and Research Committee (Ref. Number HHSC-33/2021) provided ethical approval for this study. To conduct the study, proper authority approvals were obtained, as well as informed written consent from all study participants.

Among 385 lactating mothers ,384 of them contributed in the study and it made the reply rate of 99.8 percent , greater than half (56.51 percent ) were above 20 years of age, around one third (59 percent ) had elementary educated and greater than half (55.47 percent ) were governmental workers. See table 1

## RESULTS

Table 1: Socio-Demographic Characteristics of Participants (n=384)

Variable	Category	Frequency	Percentage
Ageofmother	<20	167	43.49
	20 <sup>+</sup>	217	56.51
levelofeducation	No education	87	22.66
	Elementary	227	59.11
	High school and preparatory	46	11.98
	College and above	24	6.25
Parity	1	160	41.67
	2+	224	58.33
PlaceofWork	Governmental	213	55.47
	Private	171	44.53

### Knowledgeonexpression of breast milkandstorage

Breast milk will be expressed by breast sucker, according to more than half of the participants (53-64 percent). However, a knowledge deficit is in cleansing the breast before the expressing operation, the

Ethiopian government decreed that employers (businesses) must provide breast feeding rooms. See Table 2 for further information.

Table 2. Knowledge on expressed breast milk among working Mother InHarar, Ethiopia

breast milk will be express using	Hand	126(32.81%)
	Breast Sucker	193(50.26%)
	Both	13(3.39%)
	I don't know	52(13.54%)
is there a difference in capacity when expressing using hand or by pump	Yes	286(74.5%)
	No	27(7%)
	I don't know	71(18.5%)
is there a difference in contamination when expressing using hand or by pump	Yes	228(59.4%)
	No	108(28.1%)



	I don't know	48(12.5%)
Discarding the first few drops of milk before expressing is correct	Yes	126(32.8%)
	No	258(67.2)
	I don't know	0
expressed milk is nutritive(fulfill all necessary nutrients) for baby	Yes	330(85.9%)
	No	44(11.5%)
	I don't know	10(2.6%)
Washing a hand is significant earlier to breast milk expression	Yes	360(93.8%)
	No	24(6.3%)
	I don't know	0(0%)
Cleaning the breast is important before breast milk expression	Yes	129(33.6%)
	No	255(66.4%)
	I don't know	0(0%)
Do you know the government of Ethiopia has ruled employers(organization) should have breast feeding rooms.	Yes	52(13.5%)
	No	321(83.6%)
	I don't know	11(2.9%)
Where expressed breast milk can be stored	Refrigerator	381(99.22%)
	Freezer.	381(99.22%)
	Room.	376(97.92%)
	I do not know	6(1.56%)
expressed breast milk is safe to store for up to 8 hours at room	Yes	6(1.56%)
	No	376(97.92%)
	I don't know	2(0.52%)
expressed breast milk is safe for up to 9 months if frozen	Yes	4(1.04%)
	No	376(97.92%)
	I don't know	4(1.04%)

### Attitude towards breast milk expression

The vast majority of mothers (72 %) said that expressing breast milk is painful and 65.63 percent said it is unwieldy; the vast majority of mothers (85.90 %) said that expressed breast milk can help mothers succeed in exclusive breastfeeding for 6

months. Barely 2.08 percent of the participants believed that preserved breast milk is safe for newborns to ingest, and only half of the participants (51.82 %) agreed that stored breast milk had a lower nutritional value. look at Table 3

Table 3: Attitude towards expression of breast milk among employed Mother in Harar, Ethiopia

Expression of breast milk can let mothers to succeed exclusive breastfeeding for 6 months	Agree	330(85.90%)
	Disagree	54(14.10%)
Breast expression for milk is painful	Agree	278(72.40%)
	Disagree	106(27.60%)
Expression of breast milk is unwieldy/Fussy	Agree	252(65.63%)
	Disagree	132(34.38%)



Expression of breast milk can be done at the work- place	Agree	52(13.54%)
	Disagree	332(86.46%)
Your facility supported expression of breast milk in the facility	Agree	52(13.54%)
	Disagree	332(86.46%)
Stored expressed breastmilkishealthyforbabiestodrink	Agree	8(2.08%)
	Disagree	376(97.92%)
Storexpressedbreastmilkhasa smaller amount ofdietaryworthrelatedtomilkthatbabysucklesdirectlyfrom thebreast	Agree	199(51.82%)
	Disagree	185(48.18%)

Over all knowledge and attitude of the participants regarding knowledge and attitude towards expressed breast milk was 36% and 44% respectively

## DISCUSSION

This study revealed that there is a lack of understanding about breast milk expression and storage. More over one-third of moms (36%) have sufficient information. Eighty-six percent (86%) of the participants were aware that breast milk could be expressed by hand or with a breast pump, and more than four fifths (85%) of the participants were aware that expressed breast milk retained its nutritional value. This result is lower than studies done Australia, India, Malaysia and turkey, in this all countries the more than 50% of moms had good knowledge regarding expressing breast milk [11,12,13,14]. Educating moms on more options for offering or continuing breast feeding could encourage them to do so and avoid the use of artificial or cow milk.

Only 2% of participants know that expressed breast milk can be kept for up to 8 hours at room temperature and for up to 9 months if frozen. In this study most of moms use freezer and Refrigerator it is totally opposite with studies done previously Malaysia, USA and Spain (13,15,16) do not use freezer because they have a good knowledge that freezing will reduces antibacterial action of breast milk over time

The statement "Breast milk expression can allow moms to attain exclusive breastfeeding for 6 months" was agreed upon by 85.90 percent of the participants in this study. "Stored breast milk has less nutritional value than milk that a baby consumes immediately from the breast," said more than half of the participants (51.82 percent).

Participants in this study acknowledged that breast milk expression is uncomfortable and unwieldy/fussy (72.40 percent) and (65.63 percent) correspondingly. In terms of attitudes about the work environment, (13.54 percent) of the women in this survey stated that their workplace encourages breast milk expression.

## Limitations of the Research

The study was cross-sectional, so it does not demonstrate temporal relationships, and it is difficult to generalize because the research was conducted in a hospital rather than in the community.

## CONCLUSION

In this study, mothers' knowledge of breast milk expression, storage time, and organizational support was low, but most mothers had a positive attitude toward achieving 6 months of exclusive breastfeeding through breast milk expression.

## Recommendations

The awareness and knowledge of health care personnel about the expression of breast milk should be raised by demonstrations, videos, and on-the-job trainings, as well as in-depth advice during the ANC phase.

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### Statement of morality

An ethical committee granted permission to conduct the research. Harar College of Health Sciences.

### Potential for conflict of interest

There are no conflicts of interest declared by the authors.

### Authors' Contribution

AH & ES were in charge of the entire project, from the title to the data analysis and manuscript writing.

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