

The Perceived Benefits on Exclusive Breast Feeding Among Lactating Mothers in Singida Municipality-Tanzania: Across-Sectional Study

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Abstract

Background: Exclusive breastfeeding can be defined as the process where the baby receive only breast milk in absence of mixing it with any other food even water for the whole first six month. Only exception of vitamins, minerals supplements or medicines if needed, Breastfeeding the baby for the all first six month of life have the numerous benefits includes lowering the risk of getting gastrointestinal infection, pneumonia, Otitis media and the urinary tract infection for the infants. While mother return to the non-pregnancy weight very rapidly also seen to reduce the risk of getting or developing type 2 diabetes. Although there are some of the factors that affects this exclusive breastfeeding like sore nipple or mothers producing inadequate milk [1].

Objective: The objective of the study was to assess the level of perceived benefits of mothers practice exclusive breastfeeding among lactating mothers at health centers in Singida region.

Methodology: This study was employ descriptive cross sectional study design that involve lactating mothers who have infants less than 6 months of life. The study was done from January to February 2020 in Singida region with 281 respondents. Non-random sampling technique (convenience sampling) used with closed ended questions. The data collected analyzed by using SPSS.

Results: 300 lactating mothers who have attended to the health centers and hospitals in Singida municipal were included in the study. Surprisingly, 65.0% of the lactating mothers they have higher positive perception on benefits of exclusive breast-feeding however about 35.0% have negative perception regarding exclusive breastfeeding.

Conclusion: Most of the lactating mother in Singida region appears to have higher positive perception on the benefits of the exclusive breastfeeding. The fundamental source of data in regards to the significance of exclusive breast-feeding was the health care personals; however appears that, the obstructions for the selective breastfeeding it is just inadequate of breast milk.

Keywords: Breast-Feeding, Singida Municipality, Perceived Benefit, Baby and Mother

List of Abbreviations

AIDS - Acquired Immunodeficiency Syndrome
EBF - Exclusive breastfeeding
HIV - Human Immunodeficiency Virus

IQ - Intelligent Quotient
MED - Municipal Executive Director
MOHSW - Ministry of Health and Social welfare
NCBI - National Centre for Biotechnology Information

RCH	- Reproductive and Child Health
SDGs	- Sustainable Development Goals
SPSS	- Statistical Package for Social Science
TBAs	- Traditional birth attendants
TDHS	- Tanzania Demographic Health Survey
TFNC	- Tanzania Food and Nutrition Centre
UDOM	- University of Dodoma
UNICEF	- United Nations International Children Emergency Fund
WHO	- World Health Organization

1. Introduction

WHO identified that poor exclusive breastfeeding to infants become the risk factors for survival of the child, they estimates about 53% of acute pneumonia and 55% of diarrhea disease and death are facilitated by poor feeding practice during the first six 6 months of life. Initiation of exclusive breastfeeding within first hour of life has been shown to reduce infections to the infants [2].

WHO and UNICEF (2018) suggested that, infants ought to be early started breastfeeding inside the primary hours of birth and solely breastfed for the initial half year of life implying that no other nourishment or fluids gave including water. At that point, from the age of a half year, babies should begin eating protected and satisfactory complimentary nourishment while keeping breastfeeding up to the age of two years and past. At the point when the infant is postponed to start the breastfeeding in the primary hour of birth the results can be hazardous and the more extended infant is life the more noteworthy the hazard.

WHO (2017) comprehensively only breastfeeding was assessed in 194 nations and found that lone 40% of infants under a half year are solely breastfed (given nothing aside from bosom milk) and just 23 nations have only breastfeeding paces of more noteworthy than 60%. Proof shows that breastfeeding has intellectual and medical advantages for the two mothers and newborn child and it is basic during the initial a half year of life for baby as it helps in forestalling looseness of the bowels and pneumonia which are two significant reasons for newborn child mortality. In addition, mother who breastfed have diminished danger of getting Ovarian and breast cancer growth, as they are the two driving reasons for death among the women.

Research done in Africa show that in the low salary/center pay nations 39% of infants under a half year are just only breastfed and 58% of babies aged 20-23 months old advantages from the act of kept breastfeeding which feature the general poor act of breastfeeding in Africa [3]. Also research found that the predominance of elite breastfeeding in Sub-Saharan Africa was 36% and was most elevated in Rwanda and least in Gabon and the elements which are adding to this level was maternal training, moms inside the age of 25-34 years, provincial habitation, conveyance in wellbeing office and fourth antenatal consideration visit [4].

Infant aged less 6 months in Tanzania just 59% are exclusive breastfed, however exclusive breastfeeding decrease quickly with

age, just 27% of babies aged 4-5 months contrasted and 84% of baby aged 0-1month and 59percentage of baby aged 2-3 months. Regardless of the suggestion of select breastfeeding for first six 6 month, some of babies under age of a half year expend other fluid in extra to the breast milk, which can be plain water 11%, and other milk 4%. More than one fifth of the newborn children matured under a half year are taken care of corresponding nourishments 22% in extra to bosom milk. As of late, just 3% took care of utilizing a container with an areola [5].

In present moment, exclusive breastfeeding help in dispersing number of child since is one of the family planning technique as it defers the arrival of the fruitfulness pace of mother and in long haul, likewise decreases type 2 diabetes, breast ovarian, and the uterine malignant growth. A few researches has discovered that there is relationship between early discontinuance of breastfeeding and post-natal sorrow of mother. Early complimentary taking care of is related with decreased milk creation since breast milk is animated or regulated by recurrence and force of suckling.

In spite of its set up benefits, breastfeeding is no longer norm in much network. Multifactorial determinants of breastfeeding need strong measures at numerous levels, for example, from arrangement and lawful orders to social demeanor and qualities on mothers work and business conditions and human services administrations to empower women to breastfeed. At the point when sufficient and significant mediations conveyed, breastfeeding are responsive and can improve quickly. Best results accomplished when intercessions actualized through a few channels [6].

In addition, breastfeeding acknowledged as the best mediation for lessening newborn child mortality and guaranteeing ideal development and advancement of infants. Over 15% of 2,400,000-child mortality diminished in India by ideal breastfeeding practice. Breastfeeding is the best strategy appropriate for the physiological and mental needs of the newborn children. It evaluated that poor exclusive breastfeeding in the first six 6 months of life for newborn child brings about 1.4 million death and 10% of the disease trouble in child under 5 years old. Studies in creating nations shows that newborn child who are not breastfed are 6 to multiple times bound to kick the bucket in the main month of life than the individuals who are exclusive breastfed [7].

2. Methods Study Design and Setting

This investigation directed at Health centers found in singida municipality. Singida is among the central zone which is limited by Shinyanga region in north, Simiyu and Arusha region to the north east by Manyara region, Dodoma region in east, to the south east by Iringa region, to the south west by Mbeya region, and to the west by Tabora. The region consist of seven district, which are Singida rural, Singida urban, Manyoni district, Ikungi district, Itigi district and Mkalama. The fertility rate of Singida municipal in 2018 was 2.3 of the whole population, where the total number of delivery was 11114 in 2018. The investigation done was utilize the descriptive cross sectional design that directed from January to

February 2020. This was include the assortment of information at one point in time, which was easy to done and not cost full. This investigation also was involving the small population.

2.1. Study Population

This investigation was done to 281 breast-feeding mother who have infants less that 6 month of age.

2.2. Data Collection Tools

Organized questionnaire utilized as a tool for collecting information from the respondents to generate information that needed in this study. The questionnaire was written in English version and Swahili version, questionnaire was closes ended questions, the tools was include the question related to my specific objective. Questionnaire provided day by day from Monday to Friday to the respondents who partook in the investigation. The informed consent carried throughout the study.

2.3. Sample Size and Sampling Technique

Sample size estimation made based on the previous study by using formula (Kirkwood 2003). The previous study done in Muheza Tanga 24.1% of mother practice exclusive breast feeding infant range 6 to 12 months while others were not.

The formula used is

$$n = \frac{z^2 \times p(1-p)}{E^2}$$

Whereby; 95% confidence interval (Z) = 1.96, Absolute error = 0.05, Proportional of previous study = 24.1 % according to the study conducted at Muheza, Tanga, Sample size (n) =?

From the formula

$$n = \frac{1.96^2 \times 0.241(1-0.241)}{0.05^2}$$

= 281

Therefore, 281 breast-feeding women taken for the study

3. Data Analysis and Processing

The database made in questionnaires, then before examination, data crosschecked for passage mistakes and range checks. At that point, investigation done by utilizing SPSS version 20 for window, descriptive statistics got for various quantitative variables. Frequency and percentage utilized to introduce categorical variables then cross tabulation done to decide some huge of association between variables, also chi square test and their respective p –value are calculated. The score of the questionnaires

was 28 marks with seven (7) questions, where all score beneath 22 have negative perception on benefits of exclusive breastfeeding and those score over 22 have positive perception on exclusive breastfeeding where 1. Strong disagree 2. Disagree 3. Agree and 4. Was strong agree. The questionnaires consists 17 questions, all of closed ended questions.

4. Results Overview

In this section the discoveries from the investigation are showed; demographic characteristics and perceived benefits on the exclusive breastfeeding. The information were analyzed using statistical package version 20. Table show frequency and cross tabulation used to summarize the findings, level of perceived benefits was determined by using seven (7) items (questions) with two option agree and disagree which have total marks of 14marks where 1. disagree and 2.agree for each question. Henceforth, those score underneath 14 marks have negative perception, those score 14 marks, and more have positive perception on benefits of exclusive breastfeeding.

4.1. Social Demographic Characteristics of Respondents

The Questionnaires given and filled properly by women who were breastfeeding in Singida region. Most of the respondents were Nyaturu by tribe about (171) 57.0%, then Nyiramba about 45 = 15%, followed by Sukuma about 25= 8.3% followed by chagga of about 14= 4.7% followed by Mbulu and haya about 7 each equal to 4.6%, followed by Nyamwezi of about 6= 2.0% followed by Rangi of about 4= 1.3%. Followed by Ha and gogo about 3 each equal to 1.0%, followed by ngoni, hehe,kurya,ndali and nyakyusa of about 2 each equal to 3.5% followed by luguru, zigua, fipa, jita and zaramo of about 1 each equal to 1.5%.

Also greater number of respondent were females of primary education of about 146 = 48.7%, followed by females of secondary and above education of about 135= 45.0%, and last few females of never gone to school of about 19= 6.3%. In addition, many of respondents aged 20-29 of about 198= 66.0%, followed by who were aged 30-49 of about 84=28%, and then followed by those aged 15-19 of about 18= 6.0%.

In addition, most of respondents were marriage of about 252=84.0% and other were single, widow, or divorced of about 48= 16.0%. Then many of females were Muslims of about 171= 57.0% followed by Christian of about 129= 43.0%. Although most of respondents were home wife of about 149= 49.7% followed by women who employed or business of about 114= 38.0% followed by women who were unemployed or causal labor of about 37= 12.3%. In addition, most women were multigravida of about 216= 72.0% and prime gravida of about 84= 28% and most women were multipara of about 211= 70.3% and prime para of about 89 = 29.7%.

Variables	Frequency	Percentage
Religion		
Muslim	171	57.0
Christian	129	43.0
Education		
Never gone to school	19	6.3
Primary level of education	146	48.7
Secondary and above education	135	45.0
Age category		
15-19	18	6.0
20-29	198	66.0
30-49	84	28.0
Marital status of respondent		
Single, widow or divorced	48	16.0
Marriage	252	84.0
Gravidity		
Multigravida	216	72.0
Primegravida	84	28.0
Parity of respondent		
Primepara	89	29.7
Multipara	211	70.3
Occupation of respondent		
House wife	149	49.7
Employed or business	114	38.0
Unemployed or casual labor	37	12.3
Tribe of the respondent		
Nyaturu	171	57.0
Nyiramba	45	15.0
Sukuma	25	8.3
Mbulu	7	2.3
Chagga	14	4.7
Nyamwezi	6	2.0
haya	7	2.3
muha	3	1.0
gogo	3	1.0
ngoni	2	0.7
hehe	2	0.7
mrangi	4	1.3
kurya	2	0.7
Ndali	2	0.7
luguru	1	0.3
zigua	1	0.3
Mfipa	1	0.3
Mjita	1	0.3

zaramo	1	0.3
nyakyusa	2	0.7

Table 1: Shows the Demographic Attributes of the Investigation Respondents. N= 300 Females

4.2. Respondents Perception of Benefits on Exclusive Breast-Feeding

There were (7) seven questions to assess the respondents' perceived benefits on exclusive breastfeeding. Four options (strong disagree, disagree, agree and strong agree) were given for each statement for participants to respond. A scoring method was applied as to give the best mark as four (4) for the best option for that particular perception and (1) one for the poor perception. Hence, the maximum score that one could achieve was 28, and then the score could range from 1-28. According to the findings shows that the minimum score that one achieved was seven (7) and the maximum

was 28 mean scores was 22.5. Then from my findings, those who score less than 22.5 taken as having negative perception regarding benefits of exclusive breastfeeding and those who obtained more than 22.5 considered to having positive perception on benefits of exclusive breastfeeding.

The study done among 300 respondents shows that about 88.3% equal to 265 respondents of the women have positive perception on exclusive breastfeeding, while others who were 11.7% equal to 35 respondents have negative perception on exclusive breastfeeding.

Variables	Frequency	Percentage
Negative perception	35	11.7%
Positive perception	265	88.3%

Table 2: Shows Output of Lactating Mothers on Perceived Benefits of Exclusive Breastfeeding

Association between social demographic characteristics (independent variable) and perceived level of benefits (dependent variable)

The result have shown that the age group range from 20-29 have positive perception on benefits of exclusive breastfeeding, that

91.9% of ages 20-29 are found to have more positive perception compared to ages ranges from 15-19 and 30-45. In addition, this relationship between age and level of perceived benefits is significant. ($X^2 = 9.042$ and p value = 0.011).

DEMOGRA PHIC	POSITIVE PERCEPTION	NEGATIVE PERCEPTION	X^2	P- VALUE
Age				
15-19	72.2%	27.8%	9.042	0.011
20-29	91.9%	8.1%		
30-49	83.3%	16.7%		
Religion				
Chris tian	89.1%	10.9%	145	0.703
Musl im	87.7%	12.3%		

Marital status				
Single, widow or divorced	89.6%	10.4%	0.087	0.768
Married	88.1%	11.9%		
Gravidity				
Primegravida	91.7%	8.3%	1.258	0.262
Multigravida	87.0%	13.0%		
Parity				
Primipara	91.0%	9.0%	0.881	0.348
Multipara	87.2%	12.8%		
Occupation				
Housewife	89.3%	10.7%	2.157	0.340
Employed or business	89.5%	10.5%		
Unemployed	81.1%	18.9%		
Tribe				
Nyaturu	88.3%	11.7%	12.818	0.848
Nyiramba	82.2%	17.8%		
Sukuma	80.0%	20.0%		
Mbulu	85.7%	14.3%		

Table 3: Shows Cross Tabulation for the Respondent's Perception Level and the Relationship

4.3. Logistic Regression Analysis on Simple and Multiple Factors

As appeared in the table below the study respondents who was single they are less inclined to know benefits of only breastfeeding contracted to those who were married (OR= 0.996; 95% CI; 0.522, 1.899) even in adjustments to others factors the association remain weak (AOR=0.954; 95% CI; 0.482;1.888). The respondents with aged range 15-19 were bound to have more level regarding perceived benefits contracted to those aged 20-29 and 30-49

(OR=1.236; 95% CI; 0.442;3.455). Respondents who have none educated were more times likely to positive perception on benefits of exclusive breastfeeding and respondents who have primary education at Singida municipal. Even with adjustments with other factors the association was little adjusted still remain more times likely strong compared to those of secondary education (OR= 3.290; 95% CI; 1.223; 8.851); (OR= 3.187; 95% CI; 1.887; 5.351) respectively.

VARIABLE	OR	P-VALUE	95% CI		AOR	P-VALUE	95%CI	
			LOW	HIGH			LOW	HIGH
Marital status								
Single	0.996	0.989	0.522	1.899	0.954	0.893	0.482	1.888
Married (Ref)								
Age								
15-19	1.236	0.686	0.442	3.455	1.376	0.563	0.467	4.055
20-29	0.755	0.298	0.445	1.282	1.130	0.667	0.635	2.012
30-49(Ref)								
Education								
None education	3.290	0.018	1.223	8.851	3.552	0.017	1.256	10.040
Primary	3.187	0.001	1.887	5.351	3.247	0.001	1.879	5.612
Secondary(Ref)								

Table 4: Association Between Predictors of Perceived Benefits and Exclusive Breastfeeding

4.4. Response of the Respondents on the Questions Regarding Exclusive Breastfeeding

This variable was assessed by 7 items (questions), the result have shown that majority of the respondents they think that the breast

milk alone is sufficient for the 0-6 month's baby as 97.3% of respondents show agreeing with the statement. Consider the table 4.4 below.

Questions	Agree (%)	Disagree (%)
1. The breast milk alone is sufficient for the 0-6 month's baby	97.3%(292)	2.7%(8)
2. It is important to exclusive breastfed a baby within the first 6 month of life	74.7%(224)	25.3(76)
3. Breast milk is cheaper than supplement milk	88.0%(264)	12.0%(36)
4. Exclusive breastfeeding provides all the nutrients required by a health new born up to the age of six months.	96.0%(288)	4.0%(12)
5. Exclusive breastfeeding reduces the risk of infection to the baby	88.3%(265)	11.7%(35)
6. Exclusive breast feeding reduces risk of mother's breast problems	73.7%(221)	26.3%(79)
7. Breast milk is more effectively processed than formula milk	76.3%(229)	23.7%(71)

Table 5: Shows Percentage Response to the Participants on Questions Asked

5. Discussion

About 88.3% of the lactating mother participated in this study had Positive perception of benefits on exclusive breastfeeding and the remaining about 11.7% had Negative perception on benefits of exclusive breastfeeding. The findings compared to the investigation conducted in Kinondoni Municipality at Dar es Salaam where 92% of women who respond to the study indicates they are high perception on benefits of exclusive breastfeeding to their babies and themselves. This was due to the education, which provided to the mother during antenatal visits and after delivery since also that study report that about 99% of the mothers had given birth in health facilities.

Also another study conducted in Mbeya City showed that 72.9% of the respondents have the good perception of importance on exclusive breastfeeding since they responds that exclusive breastfeeding increases or improves the health of the child [8]. These results reveals the impacts and importance of health education and counselling provided from the hospitals where the health care workers found to be one of the most used source of information regarding exclusive breastfeeding due also to the fact that most of the parents attends to clinics with their children's where information sharing takes place [9-12]. In contrast to Mbwana et al. (2013) found that Tanzanian health facilities do not provide routine seminars and workshop on child health hence

parents had to depend on friends, neighbors, and relatives as main sources of exclusive breast-feeding information.

The study showed that a significant percent of respondents have more perception on the advantages regarding exclusive breastfeeding as seen to reduce the risk of the child to infections, bring the child to sleep well, and generally improve the health of the child's [13-18]. Moreover, this showed that hospitals and health centers have greater influence on increasing knowledge to the parents on the importance of exclusive breastfeeding.

6. Limitations of the Study

- A major limitation is the lack of some data along the country level of implementation regarding exclusive breastfeeding.
- Some of the respondents felt tired on filling the questionnaire hence not complete feeding the data
- Some of the mothers use mixed and infant formula hence they are not aware on exclusive breastfeeding.
- Also lack of milk seen to be one of the main causes why mothers do not practice exclusive breastfeeding, since most of the mothers who were not practicing exclusive breastfeeding said that lack of milk was one of the reasons they decided to continue with supplementary feeding and this can be linked to the low income and lack of food.

7. Conclusion

Most of the lactating mothers in Singida region appear to have higher positive perception on the benefits of exclusive breastfeeding [19-26]. The fundamental source of data in regards to the significance of exclusive breast-feeding was the health care personnel; however, it appears that the obstructions for selective breastfeeding are inadequate breast milk.

Declaration of Ethical Approval and Consent to Participate

The ethical approval to conduct the study was obtained from the ethical clearance committee of the University of Dodoma (UDOM), Dean of the School of Nursing and Allied Sciences. In addition, I asked permission from the municipal executive director (MED) and informed consent was given to the participant by explaining to them the benefits and objectives of the study, also confidentiality was maintained throughout the study and questionnaires did not contain names of the respondents. The participant who was not willing to participate was free to withdraw from the research at any stage without incurring any consequences.

Consent for Publication

Not applicable

Availability of Data and Materials

The datasets used for the current study are available from the corresponding author on reasonable request.

Competing Interest

The authors declare that they have no competing interests

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Author's Contributions

B. A. T established the study and contributed much to study design and data collection. F.E contributed on data analysis, review, manuscript design, and publication.

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