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Original Research Article

Knowledge, attitudes, and practices of exclusive breastfeeding among mothers in Garowe, Puntland, Somalia

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ABSTRACT

Background: Exclusive breastfeeding is a cornerstone of infant health and development, reducing mortality and improving long-term outcomes. In Garowe, Puntland, Somalia, where sociocultural norms and limited resources intersect, understanding mothers' knowledge, attitudes, and practices toward exclusive breastfeeding is imperative.
Methods: This cross-sectional study investigated these aspects to inform tailored interventions that promote positive breastfeeding practices. Using a multistage cluster sampling technique, 366 mothers who have given birth within the past two years were interviewed using a structured questionnaire. The research analyzed demographic characteristics, breastfeeding knowledge, attitudes, and practices. The data was analyzed using SPSS version 22.
Results: Preliminary results revealed positive attitudes towards breastfeeding, with mothers recognizing its significance for infant nutrition and emotional bonding. However, challenges persist, including concerns about disease transmission and societal perceptions. Sociocultural dynamics play a pivotal role, and family support is an important factor in mothers' decisions. This study contributes to understanding exclusive breastfeeding practices in Garowe and provides insights for future interventions.
Conclusions: Recommendations include tailored education, involving family and community members, and addressing misconceptions. The study underscores the importance of context-specific strategies to promote exclusive breastfeeding, ultimately improving the region's maternal and child health outcomes.

Keywords: Attitudes, Exclusive breastfeeding, Garowe, Knowledge, Mothers, Practices

INTRODUCTION

Breastfeeding stands as a fundamental pillar of infant nutrition and maternal-child health, contributing to optimal growth, development, and disease prevention.[1] In the context of global health initiatives, the practice of exclusive breastfeeding for the first six months of life has emerged as a crucial strategy to improve child survival rates and mitigate the burden of malnutrition and infectious diseases.[2] Despite its recognized significance, attaining exclusive breastfeeding remains a multifaceted challenge shaped by cultural, social, economic, and individual factors.[3,4] Breastfeeding is a vital and universally recognized component of infant and young child health, playing a crucial role in promoting optimal growth, development, and overall well-being.[1] Globally, it has been established that exclusive breastfeeding, providing infants with only breast milk for the first six months of life, is associated with numerous short-term and long-term health benefits for both mother and child.[5] However, adopting and adhering to exclusive breastfeeding practices vary widely across regions, nations, and local communities.[6]

In the context of Somalia, a nation in the Horn of Africa divided into various regions, including Puntland, exploring the knowledge, attitudes, and practices of exclusive breastfeeding among mothers is paramount.[7,8] Somalia's unique cultural, socioeconomic, and healthcare landscape influences maternal and infant care practices.[9] Puntland, specifically Garowe, represents a distinct sub-national entity with its social dynamics and contextual factors that can impact breastfeeding behaviors. Understanding the trends, challenges, and factors that shape exclusive breastfeeding practices in Garowe, Puntland, Somalia, is critical for designing targeted interventions that promote optimal infant feeding practices and ensure the well-being of both mothers and children.

This research aimed to delve into the intricate interplay between knowledge, attitudes, and practices of exclusive breastfeeding among mothers in Garowe, offering insights into the factors that either facilitate or hinder this fundamental health behavior. By examining these factors worldwide, regionally, and nationally, we can shed light on the implications of breastfeeding practices and contribute to developing strategies that enhance infant and young child health in Somalia.

METHODS

Research design

The research employs a cross-sectional study design to investigate the knowledge, attitudes, and practices of exclusive breastfeeding among mothers in Garowe, Puntland, Somalia.

Sampling

The target population consists of mothers in Garowe who have given birth within the past two years. A multistage cluster sampling technique was utilized. First, neighborhoods within Garowe were selected as clusters. Then, households within each cluster were randomly chosen. A sample size of 366 was determined using appropriate statistical formulas to ensure adequate representation while maintaining practical feasibility.

Inclusion criteria

Mothers in childbearing age who have given birth in the past two years. Mothers residing in Garowe district and were willing to participate this study after being given the consent of the study. Mothers who were mentally fit.

Exclusion criteria

Mothers residing in Garowe who were not willing to participate in the study. Mothers who were mentally ill. Mothers greater or less than the childbearing age group were not included in study.

Data collection

A structured questionnaire was developed, consisting of sections that assess demographic characteristics, knowledge, attitudes, and practices related to exclusive breastfeeding. Trained data collectors conduct face-to-face interviews with selected mothers using the questionnaire. The data was collected from September 2022 to February 2023.

Data analysis

Demographic data were summarized using frequencies and percentages. Responses related to knowledge, attitudes, and practices were analyzed to identify trends and variations among the respondents. All the data were analyzed using SPSS version 22.

Ethical considerations

Informed consent was obtained from each participant before data collection, explaining the purpose of the study, confidentiality measures, and their right to withdraw. Participant identities were kept confidential, and data were reported in aggregate form to prevent individual identification. The department of public health, Daffodil International University, Dhaka, Bangladesh, approved the study.

RESULTS

Table 1 shows that more than half (53.3%) of the respondents were in the age group 30-39 years, followed by 20-29 years (35.5%) and 40 and above years (11.20%). Little above six-tenths (60.1%) of the respondents had 4 and above children, and 33.9% had a primary education level. Based on occupation, most of them were housewives (42.1%), followed by students (19.0%), self-employed (15.0%), salaried employees (13.9%), and others (10.0%). More than half (53.0%) of the respondents were from extended families, and the rest were from nuclear families (47.0%). Based on marital status, 97.0% of the respondents were married, and 41.0% earned $100 to $300 monthly. More than three-fifths (63.9%) gave birth to their youngest child at home, and the rest in a hospital/clinic (36.1%).

Table 2 shows that 74.6% of the respondents mentioned that breastmilk is the normal food for the baby, and 23.0% mentioned that babies under six months should be given any other food during breastfeeding. Regarding the benefits of breastfeeding, most of the respondents mentioned the provision of nutrition to the child (33.0%), followed by a contribution to growth (27.0%), reduced diseases/infection risk (16.0%), develop an immune system (13.0%) and promotes bonding between mother and baby (11.0%).

Table 1: Distribution of the respondents according to socio-demographic characteristics (n=366).

Variables	Category	Frequency	Percentage
Age of the respondents	20-29 years	130	35.5
	30-39 years	195	53.3
	40 and above years	41	11.20
Number of children	1 to 4	146	39.9
	4 and above	220	60.1
Education	Primary	124	33.9
	Secondary	84	23.0
	University	66	18.0
	Others	92	25.1
Occupation	Housewife	154	42.1
	Salaried employee	51	13.9
	Self- employed	55	15.0
	Student	73	19.0
	Others	33	10.0
type of family	Nuclear	172	47.0
	Extended	194	53.0
marital status	Married	355	97.0
	Unmarried	11	3.0
Family income (USD)	<$100	84	23.0
	$100 to $300	150	41.0
	$300 to $500	70	19.0
	>$500	62	17.0
Place of birth for the youngest child	Home	234	63.9
	Hospital/clinic	132	36.1

However, breastfeeding is expected to have some disadvantages, as stated by respondents, such as contribution to disease transmission (49.4%), pain to the mother (37.0%), loss of the mother's beauty (8.2%), and limited social contribution and support/no time (5.4%). Regarding the meaning of exclusive breastfeeding, 70.2% of the respondents stated that it's feeding a baby with only breastmilk, 44.2% of them mentioned that the duration is six months, and 19.2% stated that it's more than six months. More than half (57.3%) of the respondents sourced the information regarding the length of recommended breastfeeding from the doctors, and 68.0% stated that breastmilk can be expressed, stored, and used later when the mom is not around.

Table 3 shows that 97.3% of the respondents were happy with breastfeeding their babies, 51.7% strongly agreed that they had confidence in breastfeeding after the birth of their babies, and more than half (57.0%) had a change in attitude and practice towards breastfeeding. Regarding the reason to start other foods or drinks in addition to breastmilk, the responses were babies more than six months (49.0%), to get nutritious food (22.0%), to grow faster (16.0%), and breast milk only is not enough (13.0%). Almost all (99.1%) respondents stated that Islam recommended breastfeeding till two years, and 80.0% stated that their spouse's family reaction towards breastfeeding the child was supportive.

Table 4 shows that 31.0% of the respondents had medical complications that inhibited breastfeeding initiation (mother and baby), and 75.0% had six months or longer as the duration for a baby's breastfeeding. Regarding the duration for the baby's taking breastmilk only, most of the respondents mentioned six months or longer (40.0%), followed by five months to less than six months (37.0%), one month to less than two months (11.0%), less than one months (6.0%), four months to less than five months (3.0%) and did not breastfeed (3.0%). Regarding the food or drinks given to the baby after stopping breastfeeding, the responses were baby food (46.0%), soft food such as porridge (45.0%), protein foods (6.0%), and vegetables (3.0%). More than nine-tenths (92.0%) mentioned that breastfeeding was their decision, and 12.5% faced a problem affecting breastfeeding practices.

Table 5 shows that more than half (56.0%) had a good level of knowledge regarding exclusive breastfeeding, and 44.0% had a poor level of knowledge regarding breastfeeding. More than six-tenths (66.9%) of the respondents had a positive attitude towards exclusive breastfeeding, and 33.1% had a negative attitude. Little above two-fifths (41.5%) had a good practice, and 58.5% had a poor practice regarding exclusive breastfeeding.

Table 2: Distribution of the respondents based on knowledge of exclusive breastfeeding (n=366).

Variables	Category	n	%
The normal food for the baby	Breastmilk	273	74.6
	Formula milk	10	2.7
	All the above	83	22.7
Babies <6 months should be given any other food during breastfeeding	Yes	84	23.0
	No	282	77.0
The benefits of breastfeeding	It provides nutrition	121	33.0
	Reduces diseases/infection risk	58	16.0
	Develop immune system	47	13.0
	Contributes growth	99	27.0
	Promotes bonding between mother and baby	41	11.0
The disadvantages of breastfeeding	Can contributes disease transmission	181	49.4
	Painful to the mother	135	37.0
	Limited social contribution and support/no time	20	5.4
	Loss of Mothers Beauty	30	8.2
Exclusive breastfeeding	Feeding baby with only breastmilk	257	70.2
	Feeding baby with breastmilk and water	16	4.3
	Feeding baby with breastmilk, water, and solid foods	27	7.37
	Feeding baby with breastmilk and formula milk	49	13.3
	Don't know	17	4.6
Duration of exclusively breastfeeding after birth	Less than 1 week	71	19.2
	1 week to <1 month	10	2.7
	1 month to <2 months	41	11.2
	months to <4 months	0	0.0
	4 months to <5 months	10	2.7
	6 months	162	44.2
	>6 months	72	20.0
Source of information for the length of recommended breastfeeding	Partner, family, friends/colleagues	115	31.4
	Doctor,	210	57.3
	Internet, TV, radio, newspapers	20	5.4
	Community support group	10	2.7
	Religion	11	3.0
breastmilk can be expressed, stored, and used later when mom is not around	Yes	248	68.0
	No	118	32.0

Table 3: Distribution of the respondents based on attitude toward exclusive breastfeeding (n=366).

Variables	Category	n	%
happy with breast feeding your baby	Yes	356	97.3
	No	10	2.7
Had the confidence of breastfeeding, after the birth of your baby	Agree	167	45.6
	Disagree	0	0.0
	Strongly agree	189	51.7
	Strongly disagree	10	2.7
A change in attitude and practice towards breast feeding	Yes	209	57.0
	No	157	43.0
Reasons to start other foods or drinks in addition to breastmilk	Baby >6 months	180	49.0
	To get nutritious food	79	22.0
	To grow faster	59	16.0
	Breast milk only is not enough	48	13.0
Breastfeeding the child from the religious perspective	Islam recommended till 2 years	363	99.1
	I don't know	3	1
Spouse's family reaction towards breast feeding your child	Supportive	288	78
	Unsupportive	43	12.0

Continued.

Variables	Category	n	%
	Do not know	32	9.0

Table 4: Distribution of the respondents based on practices of exclusive breastfeeding (n=366).

Variables	Category	n	%
had medical complications that inhibited breastfeeding initiation (mother and baby)	Yes	115	31.0
	No	251	69.0
Duration for baby's breastfeeding	Did not breastfeed	22	6.0
	<1 month	20	5.0
	1 month to <2 months	40	11.0
	5 months to <6 months	10	3.0
	6 months or longer	274	75.0
Duration for the baby's taking breastmilk only	Did not breastfeed	11	3.0
	Less than 1 month	21	6.0
	1 month to <2 months	40	11.0
	4 months to <5 months	11	3.0
	5 months to <6 months	138	37.0
	6 months or longer	145	40.0
Food or drinks given to the baby after stopping breastfeeding	Soft food, such as porridge	165	45.0
	Vegetables	11	3.0
	Baby food	170	46.0
	Protein foods	20	6.0
Mother's decision regarding breastfeeding the child	Yes	335	92.0
	No	31	8.0
Face problem that affected breastfeeding practice	Yes	46	12.5
	No	320	87.5

Table 5: Distribution of the respondents based on level of knowledge, attitude, and practice for exclusive breastfeeding (n=366).

	Knowledge		Attitude		Practice	
	Good	Poor	Positive	Negative	Good	Poor
n	205	161	245	121	152	214
%	56.0	44.0	66.9	33.1	41.5	58.5

DISCUSSION

The presented study explores the knowledge, attitudes, and practices of exclusive breastfeeding among mothers in Garowe, Puntland, Somalia. The study provides valuable insights into various aspects related to breastfeeding, including demographic characteristics, beliefs, attitudes, practices, and challenges. To further contextualize these findings, a comparison with similar previous research studies can shed light on trends and potential areas of improvement. The demographic characteristics of the respondents show that a significant portion falls within the age group of 30-39 years, indicating that the study captures the experiences of mothers in their prime childbearing years. The high percentage of respondents with 4 or more children suggests a sample of relatively experienced mothers. The primary education level prevalence aligns with previous research in low-resource settings, which often indicates a need for targeted breastfeeding education among this demographic.[10]

The study highlights a positive attitude towards breastfeeding, with a notable proportion (97.3%) of respondents expressing happiness with breastfeeding. This sentiment resonates with previous research that emphasizes the bonding and emotional aspects of breastfeeding.[11] The respondents' recognition of breastmilk as the normal food for babies aligns with established global recommendations for infant nutrition.[12] The belief that breastmilk provides nutrition and contributes to growth is consistent with previous studies.[13] Respondents' concerns about breastfeeding include potential disadvantages like disease transmission, maternal pain, and societal perceptions. These concerns echo findings from similar research, where maternal health and sociocultural factors impact breastfeeding practices.[14] The perception that breastfeeding may result in a loss of physical beauty might reflect societal pressures and should be addressed through education and support.

The understanding of exclusive breastfeeding duration was varied, with responses indicating different timelines. While 70.2% recognized exclusive breastfeeding as feeding only breastmilk, discrepancies in the duration (6 months or more) could result from variations in available information. Aligning these perceptions with global guidelines for exclusive breastfeeding for the first six months of life would be beneficial.[15] The study indicates that respondents' decision-making about breastfeeding was largely autonomous (92.0%), highlighting the importance of empowering mothers in making choices about their children's nutrition. The supportive reaction from the spouse's family (80.0%) suggests positive familial dynamics, which can contribute to successful breastfeeding experiences.[16] The findings indicate variation in knowledge, attitudes, and practices related to exclusive breastfeeding. While 56.0% demonstrated good knowledge, 41.5% exhibited good practices, and 66.9% displayed positive attitudes. These differences could stem from disparities in access to information, cultural factors, and healthcare support.[6] The study's results provide valuable insights into the knowledge, attitudes, and practices of exclusive breastfeeding among mothers in Garowe, Puntland, Somalia. These findings reflect both positive aspects, such as the recognition of breastmilk's nutritional value, and challenges, including concerns about pain and societal perceptions. By comparing these findings with previous research, we can identify commonalities and unique factors that influence breastfeeding practices. Addressing the identified challenges through targeted interventions and education can contribute to improved exclusive breastfeeding rates and maternal and child health outcomes.

In terms of limitations, the study employs a convenient cluster sampling technique, which may introduce some sampling bias. Responses related to breastfeeding practices and attitudes may be influenced by social desirability bias, leading to underreporting of less favorable behaviors.

CONCLUSION

The study sheds light on exclusive breastfeeding practices among mothers in Garowe, Puntland, Somalia. Positive attitudes towards breastfeeding are evident, with recognition of its nutritional importance and alignment with global recommendations. Challenges persist, including concerns about disease transmission and societal beauty standards, necessitating targeted education.

Socio-cultural factors, including family support, play a key role in shaping breastfeeding behaviors. Comparisons with prior research highlight both universal attitudes and unique challenges in this context, offering insights for potential interventions. Moving forward, comprehensive educational programs and community involvement are recommended to promote exclusive breastfeeding. This study deepens our understanding of the complex interplay between knowledge, attitudes, and practices, emphasizing the potential for improved maternal and child health outcomes through cultural awareness and support.

Recommendations

Based on the findings of the study on exclusive breastfeeding among mothers in Garowe, Puntland, Somalia, several recommendations can be made to enhance breastfeeding practices, address challenges, and promote positive attitudes towards exclusive breastfeeding:

To promote exclusive breastfeeding, a multifaceted approach is essential. Developing culturally sensitive and context-specific educational materials is a key strategy, which should dispel misconceptions about breastfeeding. These materials should emphasize its numerous benefits while also addressing concerns related to disease transmission, discomfort, and societal perceptions.

Collaboration with local healthcare providers, community leaders, and influencers is crucial to disseminate accurate information about the importance of exclusive breastfeeding. This information can be conveyed through various channels such as community gatherings, radio programs, and mobile platforms.

Integrating breastfeeding education into antenatal care visits ensures that expectant mothers receive accurate information and are prepared for successful breastfeeding initiation immediately after birth. Empowering mothers to make informed decisions about breastfeeding by providing evidence-based information is essential. They should have the knowledge and confidence to choose exclusive breastfeeding for the recommended six months.

Engage spouses, extended families, and community members in breastfeeding support networks is vital to create a conducive environment.

Collaboration with local cultural and religious leaders can address any misperceptions or barriers related to breastfeeding within the community.

Providing ongoing postnatal support is crucial. This can be done through home visits, community health workers, or virtual platforms to address any challenges mothers may face during the initial stages of exclusive breastfeeding.

Furthermore, training healthcare providers to offer accurate and consistent breastfeeding counseling and support during prenatal, postnatal, and well-baby visits is essential. This ensures that mothers receive guidance and assistance at every stage of their child's development.

Finally, conducting further research to monitor changes in knowledge, attitudes, and practices regarding exclusive breastfeeding over time is essential. This helps assess the

effectiveness of interventions and identifies areas for improvement, ensuring that efforts to promote exclusive breastfeeding are continually refined and optimized.

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REFERENCES

1. Dieterich CM, Felice JP, O'Sullivan E, Rasmussen KM. Breastfeeding and health outcomes for the mother-infant dyad. Pediatr Clin. 2013;60(1):31-48.
2. Hossain M, Islam A, Kamarul T, Hossain G. Exclusive breastfeeding practice during first six months of an infant's life in Bangladesh: a country based cross-sectional study. BMC Pediatr. 2018;18(1):1-9.
3. Talbert A, Jones C, Mataza C, Berkley JA, Mwangome M. Exclusive breastfeeding in first-time mothers in rural Kenya: a longitudinal observational study of feeding patterns in the first six months of life. Int Breastfeed J. 2020;15(1):1-9.
4. Agunbiade OM, Ogunleye OV. Constraints to exclusive breastfeeding practice among breastfeeding mothers in Southwest Nigeria: implications for scaling up. Int Breastfeed J. 2012;7:1-0.
5. Jama A, Gebreyesus H, Wubayehu T, Gebregyorgis T, Teweldemedhin M, Berhe T, et al. Exclusive breastfeeding for the first six months of life and its associated factors among children age 6-24 months in Burao district, Somaliland. Int Breastfeed J. 2020;15:1-8.
6. Dukuzumuremyi JP, Acheampong K, Abesig J, Luo J. Knowledge, attitude, and practice of exclusive breastfeeding among mothers in East Africa: a systematic review. Int Breastfeed J. 2020;15:1-7.
7. "Horn of Africa". Wikipedia, Wikimedia Foundation. 2023. Available from: en.wikipedia.org/wiki/Horn_of_Africa. Accessed on 19 August 2023.
8. Ndakwe R, Tari A. Barriers to exclusive breastfeeding among children in Gedo region, Somalia. 2019. Available from: https://www.ennonline.net/barrierstoexclusivebreastfeeding. Accessed on 19 August 2023.
9. Mohamed AA, Bocher T, Magan MA, Omar A, Mutai O, Mohamoud SA, et al. Experiences from the field: a qualitative study exploring barriers to maternal and child health service utilization in IDP settings Somalia. Int J Women's Health. 2021:1147-60.
10. Akadri A, Odelola O. Breastfeeding practices among mothers in Southwest Nigeria. Ethiop J Health Sci. 2020;30(5).
11. Krol KM, Grossmann T. Psychological effects of breastfeeding on children and mothers. Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz. 2018;61(8):977.
12. Adhikari N, Acharya K, Upadhya DP, Pathak S, Pokharel S, Pradhan PM. Infant and young child feeding practices and its associated factors among mothers of under two years children in a western hilly region of Nepal. PLoS One. 2021;16(12):e0261301.
13. Lyons KE, Ryan CA, Dempsey EM, Ross RP, Stanton C. Breast milk, a source of beneficial microbes and associated benefits for infant health. Nutrients. 2020;12(4):1039.
14. Yasser Abulreesh R, Abdullah Alqahtani I, Yahya Alshehri Z, Ali Alsubaie M, Nasser Alburayh S, Mohammed Alzamil N, et al. Attitudes and barriers to breastfeeding among mothers in Princess Nourah Bint Abdulrahman University, Riyadh, Kingdom of Saudi Arabia. Sci World J. 2021;2021:1-9.
15. Dietrich Leurer M, Misskey E. "Be positive as well as realistic": a qualitative description analysis of information gaps experienced by breastfeeding mothers. Int Breastfeed J. 2015;10(1):1-1.
16. Cook EJ, Powell F, Ali N, Penn-Jones C, Ochieng B, Randhawa G. Improving support for breastfeeding mothers: a qualitative study on the experiences of breastfeeding among mothers who reside in a deprived and culturally diverse community. Int J Equit Health. 2021;20:1-4.

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