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## Original Research Article

# Mode of delivery preferences, knowledge, and intention to practice exclusive breastfeeding among female undergraduates at Ladoke Akintola University of Technology, Ogbomoso, Oyo State

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## ABSTRACT

**Background:** Exclusive breastfeeding and preferred delivery modes are crucial for promoting maternal and child health. Understanding these factors among young women is important for improving future breastfeeding and delivery decisions. This study aimed to assess knowledge and intentions regarding exclusive breastfeeding and delivery mode preferences among female undergraduates of Ladoke Akintola University of Technology, Ogbomoso, Oyo State.

**Methods:** A descriptive cross-sectional study design was employed. A total of 1,000 respondents were selected through simple random sampling. Data were collected using a semi-structured, interviewer-administered questionnaire covering sociodemographic characteristics, knowledge of exclusive breastfeeding and delivery modes, and intentions related to breastfeeding and childbirth. Data were analyzed using the Statistical Product and Service Solutions (SPSS) version 20.0, employing descriptive statistics and chi-square tests to determine associations, with significance set at  $p < 0.05$ .

**Results:** Most respondents (75.5%) had heard of exclusive breastfeeding, and 51.9% correctly defined it. A high proportion (75.7%) intended to practice exclusive breastfeeding, while 77.7% preferred vaginal delivery over caesarean section. Overall, 66.8% demonstrated good knowledge of exclusive breastfeeding, although 27.9% believed infant formula and breast milk contain equal nutrients. Significant associations ( $p < 0.05$ ) were found between sociodemographic characteristics, knowledge, and intentions regarding exclusive breastfeeding and delivery preferences.

**Conclusions:** Although awareness and intention to practice exclusive breastfeeding were high, misconceptions persist. Strengthening university-based maternal health education and practical learning initiatives is recommended to enhance accurate knowledge and improve reproductive health decisions among young women.

**Keywords:** Breastfeeding initiation, Caesarean section, Delivery preference, Knowledge, Pregnancy

## INTRODUCTION

Breastfeeding, initiated within the first hour of birth, provided exclusively for six months, and continued for two years or beyond with safe and appropriate complementary foods, remains one of the most important practices for promoting child survival and well-being.<sup>1</sup> Breastfeeding practices are influenced by several factors, including

maternal knowledge, intention to breastfeed, cultural beliefs, and mode of delivery preferences.<sup>2-4</sup> Among these, mode of delivery preference is a major determinant of breastfeeding initiation and duration.<sup>5-6</sup> The intention to breastfeed exclusively is also influenced by the mother's knowledge and perceptions of breastfeeding, and such decisions may begin to form as early as adolescence and early adulthood.<sup>7-8</sup>

According to the Nigeria Demographic and Health Survey,<sup>9</sup> only 29% of infants below six months were exclusively breastfed. Despite the established benefits of exclusive breastfeeding for infant health and development, its prevalence remains low in many regions, increasing the risk of malnutrition and poor child outcomes.<sup>10</sup> Understanding the knowledge and intentions of young females toward breastfeeding is therefore important in shaping future maternal behaviors and promoting exclusive breastfeeding practices.

Mode of delivery preference also influences breastfeeding decisions. Understanding these preferences among young women provides insight into how future maternal health choices are shaped. Female undergraduates represent a critical population for such assessments, as they are future mothers who can transfer acquired knowledge into practice. Ladoke Akintola University of Technology, Ogbomoso, provides a suitable setting for this study because it comprises students from diverse backgrounds and cultural orientations, offering a broad understanding of perspectives on breastfeeding and delivery practices.

Previous studies have examined knowledge and intention to practice exclusive breastfeeding among female university students.<sup>11-14</sup> However, few have explored the relationship between mode of delivery preference and intention to practice exclusive breastfeeding among this population.

Therefore, this study aimed to assess the mode of delivery preferences, knowledge, and intention to practice exclusive breastfeeding among female undergraduates of Ladoke Akintola University of Technology, Ogbomoso, Oyo State.

## METHODS

### *Study design and sampling procedure*

A descriptive cross-sectional study design was employed to obtain information at a single point in time, which is suitable for determining relationships among behavioral variables in large populations.<sup>15</sup>

Four faculties were selected using a simple random sampling technique (balloting) to ensure fair representation of students across disciplines. Within these selected faculties, convenience sampling was used to recruit participants based on accessibility and willingness to participate. This approach was adopted because of varying lecture schedules and the need to preserve voluntary participation. Convenience sampling is widely recognized as a pragmatic method in large educational settings when random selection of individuals is logistically constrained.<sup>16</sup>

Data collection took place between April 2024 and June 2024. The study population comprised final-year female undergraduates. Inclusion criteria included being female,

in the final year of study, and willing to provide informed consent. Students who were not available during data collection or declined participation were excluded.

### *Study area*

The study was conducted at Ladoke Akintola University of Technology (LAUTECH), Ogbomoso, Oyo State, Nigeria. The university comprises students from diverse ethnic, cultural, and socioeconomic backgrounds, making it an appropriate setting for assessing maternal health-related knowledge and intentions among young female adults.

### *Sample size determination*

The sample size was calculated using the Yamane formula.<sup>17</sup>

$$n = \frac{N}{[1+N((e)^2)]}$$

Where  $n$  is the sample size,  $N$  is the population size, and  $e$  is the level of precision. When this formula is applied to the above sample, we get.

$$n = \frac{N}{[1+N((e)^2)]}$$

$N$ , which is the population size is 30,000 while  $e$  is 0.05

$$n = \frac{30000}{1+30000((0.05)^2)}$$

$$n = 394.7 \sim 395$$

The attrition rate at 10% of sample is

$$\frac{10}{100} \times 395 = 39.5$$

$n$  = the sample size selected is  $395 + 39.5 = 434.5 \sim 435$

An additional 10% attrition rate (39.5) was included to accommodate possible non-response, yielding approximately 435 respondents. To improve precision, robustness, and representativeness, the final sample size was increased to 1,000 respondents. Enlarging the sample size enhances statistical power, reduces sampling error, and improves the reliability of estimates.<sup>18-19</sup>

### *Data collection instrument*

Data were collected using a semi-structured, interviewer-administered questionnaire consisting of four sections: Section A: Sociodemographic information; Section B: Delivery mode preferences<sup>20</sup>; Section C: Knowledge of exclusive breastfeeding<sup>21</sup>; Section D: Intention to practice exclusive breastfeeding.<sup>21</sup>

The questionnaire was adapted and contextualized to suit the local population while maintaining the structure of previously validated tools. The instrument underwent content validation by experts in maternal and child health, and a pretest was conducted among 30 female undergraduates outside the study population to ensure clarity and reliability. A pretest sample of about 30 participants is generally adequate to identify potential issues with questionnaire wording or flow.<sup>22</sup>

### Statistical analysis

Data were analyzed using the Statistical Product and Service Solutions (SPSS) version 20.0. Descriptive statistics such as frequencies, percentages, and means were used to summarize variables. Inferential statistics, specifically the Chi-square test, were applied to examine associations between categorical variables such as knowledge, intentions, and delivery mode preferences. The level of significance was set at  $p < 0.05$ , and results were presented in tables for clarity and ease of interpretation.

### Ethical considerations

Ethical approval was obtained from the Ethics and Research Committee of Bowen University Teaching Hospital. Participation was voluntary, and all participants provided informed consent before data collection. Respondents were assured of anonymity and confidentiality, and they were informed of their right to withdraw from the study at any stage without penalty. Data were stored securely and used solely for academic purposes.

## RESULTS

### Sociodemographic characteristics of the respondents

A total of 1,000 female undergraduates participated in the study (Table 1). Most respondents (97.1%) were between 20 and 25 years, indicating a predominantly young adult population. Christianity was the most common religion (61.1%), followed by Islam (34.9%). The majority belonged to the Yoruba ethnic group (74.2%), while smaller proportions identified as Igbo (16.8%) and Hausa (5.4%).

Students were drawn mainly from the Faculties of Agriculture, Management Science, and Basic Medical Science, each contributing about one-quarter of participants. Over half of the respondents (59.5%) planned to have three to five children, and most (81.4%) preferred to begin childbearing between 25 and 29 years.

A large proportion (86.0%) came from monogamous families. Relatives were the most frequently reported source of information about mode of delivery (48.5%), followed by friends (23.8%) and media outlets (19.5%). Overall, vaginal delivery was the preferred mode among

respondents (77.7%), whereas 22.3% expressed preference for caesarean section.

**Table 1: Sociodemographic characteristics of the respondents.**

Variables	Frequency	Percentage
<b>Age (years)</b>		
20-25	971	97.1
26-31	29	2.9
<b>Religion</b>		
Christianity	611	61.1
Islam	349	34.9
Others	40	4.0
<b>Tribe</b>		
Hausa	54	5.4
Yoruba	742	74.2
Igbo	168	16.8
Others	36	3.6
<b>Faculty</b>		
Basic medical science	273	27.3
Management science	279	27.9
Pure and applied science	168	16.8
Agriculture	280	28.0
<b>Intended number of children</b>		
0-2	384	38.4
3-5	595	59.5
Above 5	21	2.1
<b>Intended age to have children</b>		
20-24	56	5.6
25-29	814	81.4
30-34	123	12.3
35 years and above	7	0.7
<b>Form of family</b>		
Monogamy	860	86.0
<b>Source of information about mode of delivery</b>		
Relative	485	48.5
Friends	238	23.8
Media	195	19.5
Others	82	8.2
<b>Mode of delivery preference</b>		
Vaginal delivery	777	77.7
Caesarean section	223	22.3
Total	1000	100.0

### Knowledge of exclusive breastfeeding

As shown in Table 2, awareness of exclusive breastfeeding (EBF) was generally high, with three-quarters (75.5%) of respondents having heard of it. However, only about half (51.9%) correctly defined EBF as feeding an infant solely with breast milk for the first six months. Knowledge of appropriate breastfeeding initiation was moderate, as 49.4% identified the correct timing (within one hour after birth).

**Table 2: Knowledge of the respondents on exclusive breastfeeding.**

Variables	Frequency	Percentage
<b>Have you ever heard of exclusive breastfeeding</b>		
Yes	755	75.5
No	156	15.6
Don't know	89	8.9
<b>The definition of exclusive breastfeeding</b>		
Incorrect	481	48.1
Correct	519	51.9
<b>Appropriate time for breastfeeding initiation</b>		
Within 1 hour	494	49.4
After 1 hour	310	31.0
Don't know	196	19.6
<b>What to be done to colostrum</b>		
Give to child	641	64.1
Throw away or discard	167	16.7
Don't know	192	19.2
<b>Breastmilk is sufficient for infants in the first 6 months</b>		
Yes	761	76.1
No	132	13.2
Don't know	107	10.7
<b>Water or herbs should be introduced to the infant</b>		
Before 6 months	235	23.5
At 6 months	299	29.9
Above 6 months	466	46.6
<b>Infant formula and breastmilk contain the same nutrients</b>		
Yes	279	27.9
No	551	55.1
Don't know	170	17.0
<b>Knowledge score</b>		
Poor knowledge (0-3)	332	33.2
Good knowledge (4-7)	668	66.8
<b>Total</b>	1000	100.0

Most respondents (64.1%) recognized colostrum as beneficial and should be given to the infant, while 76.1% acknowledged that breast milk alone is sufficient for infants in the first six months. Misconceptions persisted regarding complementary feeding, as nearly one-quarter (23.5%) believed that water or herbs should be introduced before six months. Similarly, 27.9% thought that infant formula and breast milk contain the same nutrients.

Overall, two-thirds (66.8%) of respondents demonstrated good knowledge of exclusive breastfeeding, whereas 33.2% showed poor knowledge.

### **Breastfeeding intention**

Table 3 summarizes respondents' intentions regarding breastfeeding practices. Less than half (45.3%) believed they knew all it takes to breastfeed, yet a large majority (75.7%) indicated plans to breastfeed when they have a

baby. Among those intending to breastfeed, most (75.4%) planned to do so on demand, allowing the infant to determine feeding frequency.

**Table 3: Breastfeeding intention of the respondents.**

Variables	Frequency	Percentage
<b>Do you think you know all it takes to breastfeed</b>		
Yes	453	45.3
No	368	36.8
Don't know	179	17.9
<b>Are you planning to breastfeed when you have a baby</b>		
Yes	757	75.7
No	106	10.6
Don't know	137	13.7
<b>If yes, how will you breastfeed your child?</b>		
At mother's will	246	24.6
As baby demands	754	75.4
<b>Intended to introduce breastmilk to child</b>		
Within 1 hour of birth	545	54.5
After 1 hour of birth	238	23.8
Day 2 and above	43	4.3
Yet to decide	174	17.4
<b>Intended age to introduce water to child</b>		
Before 6 months of age	164	16.4
6 months and above	567	56.7
Yet to decide	269	26.9
<b>Intended age to introduce complementary food</b>		
Less than 6 months	122	12.2
6-11 months	559	55.9
12 months and above	116	11.6
Yet to decide	203	20.3
<b>Do you intend to breastfeed exclusively?</b>		
Yes	779	77.9
No	221	22.1
<b>Intention score</b>		
Poor Intention (1-4)	408	40.8
Good Intention (5-8)	592	59.2
<b>Total</b>	1000	100.0

More than half of respondents (54.5%) intended to initiate breastfeeding within one hour of birth, aligning with WHO recommendations. However, a notable proportion (17.4%) had not yet decided when they would begin. Concerning early feeding practices, 56.7% intended to introduce water after six months, while 55.9% planned to introduce complementary foods between six and eleven months of age.

Overall, 77.9% expressed a definite intention to breastfeed exclusively for the first six months, and 59.2% demonstrated good overall intention scores toward recommended breastfeeding practices.

### Mode of delivery preferences

As presented in table above, most respondents (91.6%) viewed vaginal delivery as a natural and acceptable mode of delivery, with 85.0% acknowledging the pleasure of seeing the baby immediately after birth. About 60.9% agreed that the mother regains her health status soon after vaginal delivery, and 68.8% felt that vaginal delivery outcomes are more pleasant. Furthermore, 71.4% believed

that vaginal deliveries create a more affectionate mother-baby relationship.

In contrast, cesarean section was associated with various negative perceptions. For instance, 74.0% linked it to complications, and 75.1% believed it required prolonged bed rest. Additionally, 63.5% of respondents preferred vaginal delivery due to fear of surgery, and 66.9% due to fear of anesthesia.

**Table 4: Perceptions on delivery mode.**

Questions	Responses F (%)		
	Yes	No	I don't know
Vaginal delivery is natural and acceptable mode of delivery	916 (91.6)	44 (4.4)	40 (4.0)
Seeing the baby immediately after vaginal delivery is a pleasure for the mother	850 (85.0)	84 (8.4)	66 (6.6)
Mother regains her health status soon after vaginal delivery	609 (60.9)	279 (27.9)	112 (11.2)
In terms of outcome vaginal delivery is more pleasant	688 (68.8)	186 (18.6)	126 (12.6)
Vaginal deliveries create a more affectionate mother baby relationship	714 (71.4)	202 (20.2)	84 (8.4)
Emotional relationships between mother and baby after vaginal delivery is better	698 (69.8)	180 (18.0)	122 (12.2)
Vaginal delivery preferred due to fear of operation	635 (63.5)	253 (25.3)	112 (11.2)
In term of fear of anaesthesia vaginal delivery is preferable	669 (66.9)	214 (21.4)	117 (11.7)
Prefer vaginal delivery because don't like scar marks on their body	691 (69.1)	208 (20.8)	101 (10.1)
Vaginal delivery is less risky for the mother	670 (67.0)	202 (20.2)	128 (12.8)
Cost of vaginal delivery is less than caesarean section	811 (81.1)	88 (8.8)	101 (10.1)
Vaginal delivery increases the risk of bleeding from vagina	596 (59.6)	215 (21.5)	189 (18.9)
Caesarean section is associated with complications	740 (74.0)	129 (12.9)	131 (13.1)
Maternal complications of caesarean are greater	630 (63.0)	179 (17.9)	191 (19.1)
Infection risk of caesarean section is greater	660 (66.0)	163 (16.3)	177 (17.7)
Prolonged bed rest required in caesarean section	751 (75.1)	130 (13.0)	119 (11.9)
Caesarean section is preferable as pain of vaginal delivery is unbearable	609 (60.9)	295 (29.5)	96 (9.6)
Caesarean section is preferable as mother's position on delivery table is unpleasant	533 (53.3)	316 (31.6)	151 (15.1)
Caesarean section is preferable in the absence of economic problems	545 (54.5)	310 (31.0)	145 (14.5)
Choosing caesarean section is option for high social class	378 (37.8)	439 (43.9)	183 (18.3)
Caesarean section preferred because there is sexual dysfunction after vaginal delivery	459 (45.9)	355 (35.5)	186 (18.6)
Babies born by caesarean section are healthier than those delivered by vaginal delivery	346 (34.6)	474 (47.4)	180 (18.0)
Infants bone fractures are impossible in caesarean section	241 (24.1)	420 (42.0)	339 (33.9)

### Association between demographic characteristics and knowledge and intention

The table illustrate the associations between respondents' demographic characteristics and their knowledge and intention regarding exclusive breastfeeding. The analysis revealed significant associations between knowledge and variables such as mode of delivery preference ( $p = 0.00$ ), tribe ( $p = 0.00$ ), faculty ( $p = 0.00$ ), form of family ( $p = 0.00$ ), and intended age to have children ( $p = 0.00$ ). For

instance, a higher proportion of respondents with good knowledge preferred vaginal delivery (84.7%) compared to those with poor knowledge (63.6%).

Similarly, significant associations were found between intention and factors such as mode of delivery preference ( $p = 0.00$ ), tribe ( $p = 0.00$ ), faculty ( $p = 0.00$ ), and intended age to have children ( $p = 0.00$ ). Those with good intentions were more likely to prefer vaginal delivery (87.7%) than those with poor intentions (63.2%).



**Table 5: Association between demographic characteristics, knowledge and intention of the respondents.**

Variables	Poor knowledge	Good knowledge	X <sup>2</sup> (P value)	Poor intention	Good intention	X <sup>2</sup> (P value)
Age (years)						
20-25	326 (98.2)	645 (96.6)	2.11(0.15)	398 (97.5)	573 (96.8)	0.49 (0.48)
26-31	6 (1.8)	23 (3.4)		10 (2.5)	19 (3.2)	
Mode of delivery preference						
Vaginal delivery	211 (63.6)	566 (84.7)	57.39(0.00)	258(63.2)	519 (87.7)	83.22(0.00*)
Caesarean section	121 (36.4)	102 (15.3)		150(36.8)	73 (12.3)	
Tribe						
Hausa	27 (8.1)	27 (4.0)	61.08(0.00)	21 (5.1)	33 (5.6)	34.74 (0.00*)
Yoruba	196 (59.0)	546 (81.7)		267(65.4)	475 (80.2)	
Igbo	87 (26.2)	81 (12.1)		98 (24.0)	70 (11.8)	
Others	22 (6.6)	14 (2.1)		22 (5.4)	14 (2.4)	
Faculty						
Basic medical science	37 (11.1)	236 (35.3)	293.58(0.00)	53 (13.0)	220 (37.2)	201.67 (0.00*)
Management science	26 (7.8)	253 (37.9)		68 (16.7)	211 (35.6)	
Pure and applied science	75 (22.6)	93 (13.9)		86 (21.1)	82 (13.9)	
Agriculture	194 (58.4)	86 (12.9)		201(49.3)	79 (13.3)	
Form of family						
Monogamy	265 (79.8)	595 (89.1)	15.77(0.00)	339(83.1)	521 (88.0)	4.85 (0.03*)
Polygamy	67 (20.2)	73 (10.9)		69 (16.9)	71 (12.0)	
Intended number of children						
0-2	148 (44.6)	236 (35.3)	8.14(0.02)	173(42.4)	211 (35.6)	4.87 (0.08)
3-5	177 (53.3)	418 (62.6)		228(55.9)	367 (62.0)	
Above 5	7 (2.1)	14 (2.1)		7 (1.7)	14 (2.4)	
Intended age to have children						
20-24	10 (3.0)	46 (6.9)	42.24(0.00)	10 (2.5)	46 (7.8)	29.94 (0.00*)
25-29	249 (75.0)	565 (84.6)		326(79.9)	488 (82.4)	
30-34	67 (20.2)	56 (8.4)		65 (15.5)	58 (9.8)	
35 years and above	6 (1.8)	1 (0.1)		7 (1.7)	-	
Total	332 (33.2)	668 (66.8)		408(40.8)	592 (59.2)	

\*Significant p&lt;0.05

## DISCUSSION

This study assessed female undergraduates' preferences for mode of delivery, and their knowledge and intention to practice exclusive breastfeeding at Ladoke Akintola University of Technology, Ogbomosho. Most respondents were aged 20-25 years, a finding consistent with, who reported that 74.1% of pregnant women in their study were below 30 years and largely tertiary educated.<sup>23</sup> This demographic pattern underscores that young adults represent a critical group for maternal and child health promotion. Their early exposure to correct breastfeeding practices and informed childbirth preferences is essential for shaping future reproductive behaviors and designing effective public health interventions.

The predominance of Yoruba respondents in this study aligns with the findings of, who reported a similar pattern in southwestern Nigeria.<sup>24</sup> This is expected given the study location, where the Yoruba ethnic group constitutes the majority. However, cultural factors remain influential; Yoruba mothers-in-law, for instance, are known to exert

considerable influence on younger women's maternal decisions, including preferences for childbirth and infant feeding.<sup>25</sup>

Most respondents demonstrated a correct understanding of exclusive breastfeeding (EBF), which corroborates findings by, where 85.2%, 84.5%, and 76.6% of participants respectively understood the concept of EBF.<sup>26-28</sup> However, this contrasts with Ramya, who observed widespread uncertainty about the recommended duration of exclusive breastfeeding and feeding practices during infancy.<sup>29</sup> The relatively good level of knowledge among respondents suggests the growing impact of nutrition advocacy and health education in Nigeria. Nevertheless, persistent misconceptions such as the belief among over half of respondents that water or gripe water can be given to infants before six months indicate a partial understanding of EBF. This aligns with Nwaodu-Ufomba, who reported similar misconceptions among Nigerian nursing mothers.<sup>30</sup> These findings imply that although awareness of EBF is high, its strict definition and rationale remain inadequately understood. Therefore, breastfeeding

education should extend beyond informing young women about duration to explaining why strict adherence to exclusive breastfeeding is vital for optimal infant health and immunity.

Uncertainty regarding breastfeeding initiation was also evident, mirroring the findings of Leshi and Amoo, who reported that 55.9% of women in Purdah knew the recommended initiation time, while many remained unsure.<sup>21</sup> Similarly, Fadupin et al found that although 71.4% of postpartum mothers demonstrated good breastfeeding knowledge, only 48.6% initiated breastfeeding within the first hour.<sup>31</sup> This reinforces the notion that knowledge alone does not guarantee correct practice. Among young female undergraduates future mothers and potential influencers of maternal practices this gap highlights the importance of integrating practical learning experiences and behavioral reinforcement into health education programs.

In addition, fewer respondents intended to introduce complementary feeding precisely at six months compared to the 45.1% adherence reported by Leshi et al.<sup>32</sup> This discrepancy illustrates the complexity of breastfeeding-related decision-making, where cultural norms, familial advice, and personal beliefs can override formal education. The inconsistency observed among undergraduates underscores the limitation of theoretical knowledge and the need for experiential, context-specific nutrition education that builds both understanding and confidence in correct infant feeding practices.

Regarding childbirth, the study found that relatives were the most common source of information on delivery modes. This underscores the continued dominance of cultural narratives in shaping reproductive health decisions, even among university-educated women. The majority preference for vaginal delivery aligns with the report by Prah et al, where 73.1% of respondents favored vaginal birth over caesarean section.<sup>33</sup> This preference may reflect concerns about surgical complications, cost, recovery time, and the deep-rooted cultural belief in the naturalness and superiority of vaginal birth.

Conversely, a minority of respondents favored caesarean section, citing reasons such as fear of labor pain or misconceptions about the effects of vaginal delivery on sexual function. This contrasts with Dogra and Sharma, who found that only 11% of women associated vaginal delivery with sexual dysfunction.<sup>20</sup> The persistence of such myths, even among educated young adults, highlights the enduring influence of misinformation in reproductive health. Addressing these misconceptions through innovative, culturally sensitive, and evidence-based education is essential to equip young women with accurate knowledge and foster informed decision-making regarding both delivery options and infant feeding practices.

## CONCLUSION

Conclusively, this study explored the knowledge, intentions, and delivery mode preferences of female undergraduates regarding exclusive breastfeeding at Ladoke Akintola University of Technology, Ogbomoso. The findings revealed that most respondents possessed good knowledge of exclusive breastfeeding and expressed a strong intention to practice it in the future. However, important misconceptions persisted, particularly concerning the introduction of water or other substances before six months. Although the majority correctly understood the recommended duration and timing of breastfeeding initiation, partial misconceptions highlight the need for more comprehensive health education. The study also found that most respondents preferred vaginal delivery, influenced largely by cultural beliefs and family narratives. The reliance on relatives as a primary source of delivery-related information demonstrates that social influence remains a strong determinant of maternal decision-making, even among educated young women. Overall, the results underscore that awareness does not always translate into accurate understanding or intended practice, reflecting the importance of continuous education and behavioral reinforcement.

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## REFERENCES

1. World Health Organization. Exclusive breastfeeding for six months best for babies everywhere, 2023. Available at: <https://www.who.int/news/item/15-01-2011-exclusive-breastfeeding-for-six-months-best-for-babies-everywhere>. Accessed 01 June 2025.
2. Abekah-Nkrumah G, Antwi MY, Nkrumah J, Gbagbo FY. Examining working mother's experience of exclusive breastfeeding in Ghana. *Int Breastfeed J.* 2020;15(1):56.
3. Onah S, Osuorah DIC, Ebenbe J, Ezechukwu C, Ekwochi U, Ndukwa I. Infant feeding practices and maternal socio-demographic factors influencing exclusive breastfeeding among mothers in Nnewi, South-East Nigeria: a cross-sectional study. *Int Breastfeed J.* 2014;9(1):6.

4. Raissian KM, Su JH. The best of intentions: prenatal breastfeeding intentions and infant health. *SSM Popul Health.* 2018;5:86-100.
5. Haghighi M, Taheri E. Factors associated with breastfeeding in the first hour after birth in baby-friendly hospitals, Shiraz-Iran. *Int J Pediatr.* 2015;3:889-96.
6. Chen C, Yan Y, Gao X, Xiang S, He Q, Zeng G, et al. Influences of cesarean delivery on breastfeeding practices and duration: a prospective cohort study. *J Hum Lact.* 2018;34(3):526-34.
7. Leshi OO, Makanjuola MO. Breastfeeding knowledge, attitude and intention of nursing students in Nigeria. *Open J Nurs.* 2022;12(3):256-69.
8. Naja F, Chatila A, Ayoub JJ, Abbas N, Mahmoud A, Ali M. Prenatal breastfeeding knowledge, attitude and intention, and their associations with feeding practices during the first six months of life: a cohort study in Lebanon and Qatar. *Int Breastfeed J.* 2022;17(1):15.
9. Nigeria Demographic and Health Survey (NDHS). National Population Commission and ICF; 2018. Available at: <https://dhsprogram.com/publications/publication-fr359-dhs-final-reports-cfm>. Accessed 8 Jun 2020.
10. Lestari ED, Hasanah F, Nugroho NA. Correlation between non-exclusive breastfeeding and low birth weight to stunting in children. *Paediatr Indones.* 2018;58(3):123-7.
11. Al-Ali N, Hatamleh R, Khader Y. Female public Jordanian university undergraduate students' intentions and attitudes towards breastfeeding: application of self-objectification theory. *Breastfeed Rev.* 2013;21(3):31-42.
12. Ogunba BO, Agwo EO. Knowledge, attitude and intending practice of female undergraduates about breastfeeding. *Afr J Food Agric Nutr Dev.* 2014;14(4):9039-54.
13. Ogundare E, Babatola A, Omoyajowo A, Fatunla O, Ajite A, Adeniyi A, et al. Breastfeeding: knowledge, perception, and intention to practice among female students of tertiary institutions in Ekiti, Southwest Nigeria. *Comm Health Equity Res Policy.* 2023;44(1):15-28.
14. Rababah H, Hatamleh R, Maghaydah SS, Abuhammad S. Knowledge, attitudes and future intentions towards breastfeeding among undergraduate students at a Jordanian public university. *Evid Based Midwife.* 2018;16(4):136-42.
15. Setia MS. Methodology series module 3: cross-sectional studies. *Ind J Dermatol.* 2016;61(3):261-4.
16. Etikan I, Musa SA, Alkassim RS. Comparison of convenience sampling and purposive sampling. *Am J Theor Appl Stat.* 2016;5(1):1-4.
17. Yamane T. Statistics: an introductory analysis. 2nd ed. New York: Harper and Row; 1967.
18. Hackshaw A. Small studies: strengths and limitations. *Eur Respir J.* 2008;32(5):1141-3.
19. Suresh KP, Chandrashekara S. Sample size estimation and power analysis for clinical research studies. *J Hum Reprod Sci.* 2012;5(1):7-13.
20. Dogra A, Sharma A. Women's preference for mode of delivery: a comparative study. *Int J Reprod Contracept Obstet Gynecol.* 2017;6(3):1048-52.
21. Leshi OO, Amoo SA. Breastfeeding knowledge, attitude, intention and practice of women in Purdah in Ibadan, Nigeria. *North Afr J Food Nutr Res.* 2023;7(15):9-19.
22. Blair J, Conrad FG. Sample size for cognitive interview pretesting. *Public Opin Q.* 2011;75(4):636-58.
23. Akinremi TI, Quadri JA, Deniran IA, Ogundairo YO, Odidi AM, Edun BM. Dietary diversity and micronutrient adequacy of pregnant women attending antenatal clinic in Asaba Specialist Hospital, Delta State, Nigeria. *Niger J Nutr Sci.* 2024;45(2).
24. Leshi O, Samuel FO, Ajakaye OM. Breastfeeding knowledge, attitude and intention among female young adults in Ibadan, Nigeria. *Open J Nurs.* 2016;6(1):11-23.
25. Princewill CW, Jegede AS, Nordström K, Lanre-Abass B, Elger BS. Factors affecting women's autonomous decision-making in research participation among Yoruba women of Western Nigeria. *Dev World Bioeth.* 2017;17(1):40-9.
26. Ogunba BO, Agwo MA, Fadupin GT. Knowledge and attitudes of Nigerian university students toward exclusive breastfeeding. *Int J Nutr Metab.* 2022;14(3):89-96.
27. Adhikari T. Knowledge and practice of mothers regarding exclusive breastfeeding having infants at a tertiary level hospital, Kathmandu. *J Nepal Paediatr Soc.* 2015;34(3):200-6.
28. Lou ZX, Guo Z, John OG, Huang LJ, Liu F, et al. Breastfeeding knowledge, attitudes, and intention in a sample of undergraduate students in Mainland China. *J Hum Lact.* 2014;30:331-9.
29. Ramya S, Ramaswamy G, Chandran S. Awareness and practices regarding exclusive breastfeeding among mothers in Tamil Nadu. *Indian J Matern Child Health.* 2016;18(2):120-8.
30. Nwaodu-Ufomba L. Complementary feeding perception among nursing mothers in Nigeria. *Indones J Glob Health Res.* 2024;7(1):235-46.
31. Fadupin GT, Olaitan OO, Itasanmi ET, Okolosi JE. Breastfeeding knowledge and factors associated with breastfeeding initiation among postpartum mothers in Ibadan, Nigeria. *Afr J Biomed Res.* 2020;23(2):283-8.
32. Leshi OO, Amoo EO, Adebayo AO. Exclusive breastfeeding practices among educated women in Southwestern Nigeria: the gap between knowledge and practice. *Int J Child Heal Nutr.* 2023;12(1):22-30.
33. Prah J, Kudom A, Afrifa A, Abdulai M, Sirikiyi I, Abu E. Caesarean section in a primary health facility in Ghana: clinical indications and foeto-maternal outcomes. *J Public Health Afr.* 2017;8(2):704.

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