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Prevalence and Determinants of Exclusive Breastfeeding and Complementary Feeding Among Working Class Mothers in Kano Municipal, Nigeria

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Abstract

Introduction: Exclusive breastfeeding (EBF) and appropriate complementary feeding are essential for improving infant survival, growth, and development. However, many working mothers face challenges in maintaining recommended infant feeding practices because of workplace constraints, cultural beliefs, and family influence. This study assessed the prevalence and determinants of exclusive breastfeeding and complementary feeding practices among working mothers in Kano Municipal Local Government Area, Kano State, Nigeria.

Methods: A descriptive cross-sectional study was conducted among 325 working mothers with children aged 0–24 months. A multistage sampling technique was used to select respondents. Data were collected using interviewer-administered structured questionnaires. Descriptive statistics, Chi-square tests, and multivariable logistic regression analyses were performed to identify factors associated with exclusive breastfeeding and complementary feeding practices. Statistical significance was set at $p < 0.05$.

Results: The prevalence of exclusive breastfeeding for six months was 52.3%, while only 27.1% of mothers introduced complementary feeding at the recommended age of six months. Availability of breastfeeding breaks at the workplace ($p = 0.029$), community encouragement ($p = 0.001$), family support ($p = 0.001$), absence of discouraging traditional beliefs ($p < 0.001$), cultural influence ($p = 0.026$), advice from elders ($p < 0.001$), and attendance at breastfeeding counselling sessions ($p = 0.013$) were significantly associated with exclusive breastfeeding. Logistic regression analysis identified workplace breastfeeding support, family and community support, traditional beliefs, elder advice, and breastfeeding counselling as significant predictors of exclusive breastfeeding.

Conclusion: Exclusive breastfeeding prevalence among working mothers was moderate, while appropriate complementary feeding practices remained low. Workplace support, breastfeeding education, and stronger family and community support systems are essential for improving optimal infant feeding practices.

Keywords: Exclusive breastfeeding; complementary feeding; working mothers; infant feeding practices; determinants; Kano State.

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Introduction

Breastfeeding is universally recognized as one of the most effective interventions for improving child survival, optimal growth, and cognitive development. The *World Health Organization* (WHO) recommends exclusive breastfeeding for the first six months of life, followed by the introduction of safe and nutritionally adequate complementary foods while breastfeeding continues up to two years or beyond (World Health Organi-

zation, 2021). Optimal breastfeeding practices provide numerous health benefits, including protection against infectious diseases, improved nutritional status, and enhanced cognitive development among children (Victora et al., 2016).

Globally, suboptimal breastfeeding practices remain a major public health challenge. It has been estimated that optimal breastfeeding could prevent over 823,000 deaths among children under five years annually and substantially reduce maternal mortality (Rollins et al., 2016). Despite these benefits, only about 41% of infants younger than six months are exclusively breastfed worldwide, which remains far below the global target of 70% by 2030 (United Nations Children's Fund, 2021). Inadequate breastfeeding practices contribute significantly to childhood morbidity, malnutrition, and mortality, particularly in low- and middle-income countries (Black et al., 2013).

Complementary feeding, defined as the introduction of solid or semi-solid foods alongside breast milk after six months of age, is another critical component of infant nutrition. The period between 6 and 23 months is particularly important because children require additional nutrients to support rapid growth and development (World Health Organization, 2003). However, inappropriate complementary feeding practices such as early introduction of foods, poor dietary diversity, and inadequate feeding frequency remain common in many developing countries and contribute significantly to child malnutrition and stunting (Dewey, 2013).

In sub-Saharan Africa, breastfeeding is nearly universal, although adherence to exclusive breastfeeding recommendations remains inconsistent. Studies across the region have reported exclusive breastfeeding prevalence ranging from 49% to 59%, with considerable variations across countries and communities (Issaka et al., 2015). In Nigeria, the 2018 Nigeria Demographic and Health Survey reported that only 29% of infants younger than six months were exclusively breastfed, indicating substantial gaps between recommended and actual feeding practices (National Population Commission (NPC) [Nigeria] & ICF, 2019).

Maternal employment has been identified as a major factor influencing infant feeding practices. Working mothers often face challenges in maintaining exclusive breastfeeding because of limited maternity leave, lack of breastfeeding-friendly workplace policies, and rigid work schedules (Ogbuanu et al., 2011). Increasing participation of women in the workforce, particularly in urban settings, has introduced additional complexities in balancing employment responsibilities with recommended infant feeding practices (Dinour & Szaro, 2017).

Socio-cultural factors also significantly influence breastfeeding and complementary feeding practices. In many Nigerian communities, traditional beliefs, family influence, and advice from elders shape maternal decisions regarding infant feeding. These cultural expectations may conflict with recommended feeding guidelines and contribute to early cessation of exclusive breastfeeding or premature introduction of complementary foods (Agunbiade & Ogunleye, 2012). Previous studies in Nigeria have similarly shown that family support, maternal education, and community perception strongly influence breastfeeding practices among mothers (Onah et al., 2014; Sholeye & Abosede, 2014).

Kano State, located in northern Nigeria, has a large population of women engaged in both formal and informal employment. Although awareness of exclusive breastfeeding is relatively high, studies have documented persistent gaps between knowledge and practice of recommended infant feeding practices in the region (Ogbo et al., 2015). Working mothers in urban areas such as Kano Municipal frequently experience workplace constraints, limited maternity protection, and socio-cultural pressures that may hinder optimal infant feeding practices.

Understanding the prevalence and determinants of exclusive breastfeeding and complementary feeding among working mothers is essential for developing effective interventions aimed at improving child nutrition and health outcomes. Therefore, this study assessed the prevalence of exclusive breastfeeding and complementary feeding practices and identified factors associated with these practices among working mothers in Kano Municipal Local Government Area, Kano State, Nigeria.

Methods

A community-based descriptive cross-sectional study was conducted to assess the prevalence and determinants of exclusive breastfeeding and complementary feeding practices among working mothers in Kano Municipal Local Government Area (LGA), Kano State, Nigeria. A cross-sectional design was considered appropriate because it allows simultaneous assessment of infant feeding practices and associated factors within a defined population at a specific point in time (Ogbo et al., 2016; Setegn et al., 2012).

The study was conducted in Kano Municipal LGA, located within Kano metropolitan area in northern Nige-

ria. Kano State is one of the most populous states in Nigeria, with an estimated population exceeding 16 million people. Kano Municipal LGA covers approximately 17 km^2 and comprises thirteen administrative wards including Chedi, Dan'agundi, Gandun Albasa, Jakara, Kankarofi, Shahuci, Sharada, Sheshe, Tudun Nufawa, Tudun Wazirci, Yakasai, Zaitawa, and Zango. The area is characterized by a mixture of formal and informal economic activities, with many women engaged in trading, civil service, private employment, and small-scale businesses.

The study population comprised working mothers residing in Kano Municipal LGA who had children aged 0–24 months. Working mothers were defined as women engaged in any form of income-generating activity, including public sector employment, private sector employment, self-employment, or informal economic activities outside the home.

Participants were eligible for inclusion if they were working mothers with children aged 0–24 months, had resided in Kano Municipal LGA for at least six months prior to the study, were engaged in any form of employment or income-generating activity, and provided informed consent. Mothers who were unemployed, on prolonged maternity leave, critically ill, or unable to provide informed consent were excluded from the study.

The minimum sample size was determined using the single population proportion formula for cross-sectional studies:

$$n = \frac{Z^2 p(1-p)}{d^2}$$

where:

- n = minimum sample size
- Z = standard normal deviate at 95% confidence interval (1.96)
- p = estimated prevalence of exclusive breastfeeding (26.9%) from a previous Nigerian study (Ogbo et al., 2015)
- d = margin of error (5%)

Substituting the values gave a minimum sample size of 302 respondents. To account for a possible 10% non-response rate, an additional 30 participants were added, resulting in a final sample size of 332 respondents. However, 325 questionnaires were correctly completed and analyzed, giving a response rate of 98%.

A multistage sampling technique was employed to select study participants. In the first stage, seven wards were selected from the thirteen wards in Kano Municipal LGA using simple random sampling by balloting without replacement. In the second stage, three settlements were randomly selected from each selected ward, resulting in 21 settlements. Household listing was subsequently conducted within each settlement to establish a sampling frame. Systematic sampling was then used to select households based on calculated sampling intervals. From each selected household, one eligible working mother with a child aged 0–24 months was selected. Where more than one eligible participant was identified within a household, simple random sampling by balloting was used to select one respondent.

The dependent variables were exclusive breastfeeding practice and complementary feeding practice. Independent variables included socio-demographic characteristics (age, education, marital status, income, and number of children), workplace-related factors (occupation, working hours, maternity leave duration, breastfeeding breaks, and distance to workplace), and sociocultural factors (family support, community encouragement, traditional beliefs, and breastfeeding counselling).

Data were collected using an interviewer-administered structured questionnaire adapted from previous breastfeeding studies and WHO infant feeding guidelines (World Health Organization, 2010; World Health Organization, 2021). The questionnaire consisted of sections assessing socio-demographic characteristics, breastfeeding practices, complementary feeding practices, workplace-related factors, and sociocultural influences.

Content validity of the instrument was assessed by public health experts and maternal and child health specialists. A pre-test was conducted among 10% of the sample size in a neighbouring LGA not included in the main study, and necessary modifications were made to improve clarity and consistency. Reliability was assessed using Cronbach's alpha, with a coefficient of ≥ 0.70 considered acceptable for internal consistency.

Data were collected by trained research assistants fluent in both English and Hausa languages. Face-to-face interviews were conducted after obtaining written informed consent from participants. Completed questionnaires were checked daily for completeness and consistency by the research supervisor.

Collected data were coded and entered into Microsoft Excel before being exported to Statistical Package for the Social Sciences (SPSS) version 23 for analy-

sis. Descriptive statistics including frequencies, percentages, means, and standard deviations were used to summarize the data. Bivariate analysis using the Chi-square test was performed to determine associations between independent variables and infant feeding practices. Variables with $p < 0.05$ at the bivariate level were entered into multivariable logistic regression models to identify independent predictors of exclusive breastfeeding. Adjusted odds ratios (aORs) and 95% confidence intervals were reported, and statistical significance was set at $p < 0.05$.

Ethical approval for the study was obtained from the Research Ethics Committee of the Kano State Ministry of Health. Permission to conduct the study was also obtained from relevant local authorities and community leaders. Participation was voluntary, and informed consent was obtained from all respondents prior to data collection. Participants were assured of confidentiality and anonymity, and no personal identifiers were recorded. Respondents were informed of their right to withdraw from the study at any stage without consequences.

Results

A total of 332 questionnaires were administered, out of which 325 were correctly completed and included in the final analysis, yielding a response rate of 98%. The high response rate was achieved because interviewer-administered questionnaires were conducted directly within respondents' communities and households. Eligible participants were interviewed immediately after obtaining informed consent, thereby minimizing non-response and incomplete questionnaires. The socio-demographic characteristics of the respondents are presented in Table 1. The mean age of respondents was 30.86 ± 8.21 years. The largest proportion of respondents 110 (33.8%) were aged 25–34 years, followed by 107 (32.9%) aged 35–44 years. Most respondents were currently married (81.2%). Regarding educational attainment, 28.9% had tertiary education, while 24.6% had no formal education. The majority of respondents earned ₦20,000 or less monthly (64.6%). Furthermore, 35.0% reported working more than eight hours daily. Table 2 shows exclusive breastfeeding practices among respondents. The findings revealed that 170 (52.3%) practiced exclusive breastfeeding for six months. Work-related challenges and cultural or family influence were the most frequently reported reasons for discontinuing exclusive breastfeeding before six months (21.8% each). Additionally, 48.9% reported expressing breast milk while at work, while 51.7% indicated absence of designated breastfeeding spaces at their workplaces.

Socio-Demographic Characteristics of Respondents

Table 1: Socio-Demographic Characteristics of Respondents ($n = 325$)

Variables	Frequency	Percentage (%)
Age (Years)		
18–24	94	28.9
25–34	110	33.8
35–44	107	32.9
> 45	14	4.4
Mean ± SD	30.86 ± 8.21	
Level of Education		
No formal education	80	24.6
Primary education	86	26.5
Secondary education	65	20.0
Tertiary education	95	28.9
Marital Status		
Currently married	264	81.2
Divorced/Separated	49	15.1
Widowed	12	3.7
Average Monthly Income		
≤ ₦20,000	210	64.6
₦21,000–₦50,000	79	24.3
> ₦50,000	36	11.1
Number of Children		
1–2 children	142	43.7
3–4 children	118	36.3
5 or more children	65	20.0
Occupation		
Government employee	75	23.1
Private sector employee	76	23.4
Self-employed	86	26.5
Others	88	27.1
Working Hours per Day		
Less than 6 hours	98	30.2
6–8 hours	113	34.8
More than 8 hours	114	35.0

Percentages may not sum exactly to 100 due to rounding.

Complementary feeding practices are summarized in Table 3. Only 88 (27.1%) introduced complementary feeding at the recommended age of six months. Mashed fruits and vegetables were the most commonly introduced foods (28.6%). Advice from family members or healthcare workers (28.3%) and perceived infant hunger (28.0%) were the leading reasons for introducing complementary foods.

Exclusive Breastfeeding Practices

Table 2: Exclusive Breastfeeding Practices Among Respondents ($n = 325$)

Variables	Frequency	Percentage (%)
Exclusive Breastfeeding Rate		
Exclusively breastfed	170	52.3
Not exclusively breastfed	155	47.7
Reasons for Stopping EBF		
Work-related challenges	71	21.8
Insufficient breast milk	68	20.9
Health issues	53	16.3
Cultural/family influence	71	21.8
Others	62	19.1
Breastfeeding Frequency		
On demand	108	33.2
Every 2–3 hours	120	36.9
Less than 8 times daily	97	29.9
Expression of Breast Milk at Work		
Yes	159	48.9
No	166	51.1
Storage of Expressed Milk		
Refrigerator	108	33.2
Room temperature	117	36.0
Do not express milk	100	30.8
Feeding Method for Expressed Milk		
Spoon/cup feeding	116	35.7
Bottle feeding	99	30.5
Others	110	33.8
Workplace Breastfeeding Support		
Maternity leave	91	28.0
Lactation room	70	21.5
Flexible work hours	89	27.4
No support	75	23.1
Duration of Maternity Leave		
Less than 6 weeks	112	34.5
6–12 weeks	105	32.3
More than 12 weeks	108	33.2
Designated Breastfeeding Space		
Yes	157	48.3
No	168	51.7

Complementary Feeding Practices

Table 3: Complementary Feeding Practices Among Respondents ($n = 325$)

Variables	Frequency	Percentage (%)
Age at Introduction of Complementary Foods		
Before 4 months	90	27.7
4–5 months	65	20.0
6 months	88	27.1
After 6 months	82	25.2
First Complementary Food Introduced		
Cereal-based food	83	25.5
Mashed fruits/vegetables	93	28.6
Commercial baby formula	79	24.3
Others	70	21.5
Frequency of Complementary Feeding		
1–2 times daily	115	35.4
3–4 times daily	104	32.0
More than 4 times daily	106	32.6
Reason for Introducing Complementary Foods		
Insufficient breast milk	63	19.4
Maternal workload	79	24.3
Baby's hunger	91	28.0
Advice from family/healthcare workers	92	28.3
Primary Source of Information		
Healthcare provider	87	26.8
Family members	74	22.8
Social media	81	24.9
Others	83	25.5
Feeding Method Used		
Spoon feeding	103	31.7
Bottle feeding	111	34.2
Self-feeding	111	34.2
Challenges Faced		
Time constraints	71	21.8
Financial constraints	84	25.8
Lack of knowledge	84	25.8
Child refusal	86	26.6

Work-Related Factors Affecting Infant Feeding Practices

Table 4: Work-Related Factors Affecting Infant Feeding Practices ($n = 325$)

Variables	Frequency	Percentage (%)
Occupation		
Government employee	75	23.1
Private sector employee	76	23.4
Self-employed	86	26.5
Others	88	27.1
Working Hours per Day		
Less than 6 hours	98	30.2
6–8 hours	113	34.8
More than 8 hours	114	35.0
Distance from Home to Workplace		
Less than 5 km	107	32.9
5–10 km	94	28.9
More than 10 km	124	38.2
Provision of Breastfeeding Breaks		
Yes	159	48.9
No	166	51.1
Hours Spent Away from Baby Daily		
Less than 4 hours	109	33.5
4–8 hours	120	36.9
More than 8 hours	96	29.6
Childcare Support at Home		
Yes	148	45.5
No	177	54.5
Caregiver While at Work		
Family member	103	31.7
House help	108	33.2
Daycare	114	35.1

Table 4 presents work-related factors affecting infant feeding practices. Most respondents (35.0%) worked more than eight hours daily, while 38.2% reported that their workplace was located more than 10 km from home. Furthermore, 51.1% reported absence of breastfeeding breaks at work, and 54.5% indicated lack of childcare support at home.

Predictors of Exclusive Breastfeeding

Multivariable logistic regression analysis identified several significant predictors of exclusive breastfeeding among respondents (Table 5). Availability of breastfeeding breaks at the workplace significantly increased the likelihood of practicing exclusive breastfeeding (aOR = 1.961; 95% CI: 0.585–6.573; $p = 0.029$). Community encouragement, family support, absence of discouraging traditional beliefs, cultural norms, advice from elders, and attendance at breastfeeding counselling sessions were also significantly associated with exclusive breastfeeding practices. :contentReference[oaicite:0]index=0

Discussion

This study assessed the prevalence and determinants of exclusive breastfeeding and complementary feeding practices among working mothers in Kano Municipal Local Government Area, Kano State, Nigeria. The findings revealed that slightly more than half of the respondents practiced exclusive breastfeeding for six months, while less than one-third introduced complementary feeding at the recommended age of six months. Workplace support, family encouragement, cultural beliefs, elder influence, and breastfeeding counselling were identified as significant determinants of exclusive breastfeeding practices. However, none of the socio-demographic or workplace variables showed significant association with complementary feeding practices.

The prevalence of exclusive breastfeeding observed in this study (52.3%) indicates a moderate level of adherence to recommended infant feeding practices among working mothers. This level of prevalence may be attributed to increasing awareness of breastfeeding benefits through antenatal care services and maternal health education programs available in urban communities. Similar findings have been reported in studies conducted in Sagamu and Sokoto, Nigeria, where moderate exclusive breastfeeding prevalence was observed among mothers despite increasing maternal employment (Oche et al., 2011; Sholeye & Abosede, 2014). Comparable prevalence rates have also been reported in Ghana and Ethiopia, where exclusive breastfeeding rates ranged from 49% to 58% among mothers attending healthcare facilities (Issaka et al., 2015). Globally, however, exclusive breastfeeding prevalence remains relatively low, with approximately 41% of infants younger than six months exclusively breastfed according to global estimates (United Nations Children's Fund, 2021). The similarities between this study and other African studies may reflect comparable socio-cultural contexts and maternal health interventions, while differences from global estimates may be explained by variations in maternal employment patterns, healthcare access, and breastfeeding promotion programs.

The study also found that only 27.1% of mothers in-

Table 5: Predictors of Exclusive Breastfeeding Among Working Mothers

Variables	EBF	Non-EBF	aOR	95% CI	*p*-value
Breastfeeding breaks at work					
Yes	14 (4.3)	93 (28.6)	1.961	0.585–6.573	0.029*
No	51 (15.7)	167 (51.4)			
Community encouragement					
Yes	32 (9.8)	73 (22.5)	0.403	0.231–0.702	0.001*
No	33 (10.2)	187 (57.5)			
Family support					
Yes	30 (9.2)	67 (20.6)	0.405	0.231–0.710	0.002*
No	35 (10.8)	193 (59.4)			
Traditional beliefs discouraging EBF					
Yes	36 (11.1)	210 (64.6)	3.383	1.898–6.032	< 0.001*
No	29 (8.9)	50 (15.4)			
Cultural norms influencing feeding decisions					
Yes	33 (10.2)	93 (28.6)	0.540	0.312–0.934	0.028*
No	32 (9.8)	167 (51.4)			
Advice from elders					
Yes	33 (10.2)	43 (13.2)	0.192	0.107–0.345	< 0.001*
No	32 (9.8)	217 (66.8)			
Breastfeeding counselling attendance					
Yes	30 (9.2)	78 (24.0)	0.500	0.287–0.871	0.014*
No	35 (10.8)	182 (56.0)			

*Statistically significant; aOR = Adjusted Odds Ratio; CI = Confidence Interval.

troduced complementary feeding at the recommended age of six months, suggesting that optimal complementary feeding practices remain low among working mothers in Kano Municipal. Similar findings have been reported in studies conducted in Plateau and Kaduna States, where many mothers introduced complementary foods either too early or too late because of maternal workload and cultural influences (Onah et al., 2014). Studies conducted in Uganda and Kenya similarly documented suboptimal complementary feeding practices among employed mothers, particularly in urban settings where work schedules interfere with infant feeding practices (Kimani-Murage et al., 2011). Globally, inadequate complementary feeding remains a major public health concern, with less than half of children aged 6–23 months meeting minimum dietary diversity and meal frequency recommendations (World Health Organization, 2009). These similarities across settings may be attributed to common challenges such as maternal workload, limited nutrition knowledge, and persistent cultural feeding practices.

Workplace-related challenges were identified as important barriers to exclusive breastfeeding among respondents in this study. Mothers who had access to breastfeeding breaks at the workplace were significantly more likely to practice exclusive breastfeeding. This finding suggests that supportive workplace policies enable mothers to continue breastfeeding while fulfilling employment responsibilities. Previous studies conducted in Nigeria have reported that lack of maternity leave, inflexible work schedules, and absence of breastfeeding facilities significantly affect breastfeeding practices among working mothers (Ogbo et al., 2015). Similar findings have also been reported in studies conducted in South Africa and Kenya, where workplace barriers were identified as major determinants of breastfeeding discontinuation among employed women (Tylleskär et al., 2011). Globally, workplace breastfeeding support programs including lactation rooms and flexible working hours have been shown to significantly improve breastfeeding duration and continuation among working mothers (Dinour & Szaro, 2017). These findings underscore the importance of workplace policies in supporting breastfeeding practices.

Family and community support were also found to significantly influence exclusive breastfeeding practices in this study. Mothers who reported receiving support from family members and communities were more likely

to practice exclusive breastfeeding. This finding may reflect the important role family members play in childcare decisions within many African households. Similar studies conducted in Ibadan and Enugu demonstrated that support from spouses, grandmothers, and extended family members positively influences breastfeeding practices among mothers (Sholeye & Abosede, 2014). Comparable observations have also been reported in other African countries where family members significantly influence maternal childcare decisions (Kavle et al., 2017). Globally, social support networks have consistently been recognized as important determinants of breastfeeding behaviour, particularly in societies where childcare responsibilities are shared among extended family members (Rollins et al., 2016). These findings highlight the importance of involving family members in breastfeeding promotion interventions.

Cultural beliefs and traditional practices were also identified as important influences on exclusive breastfeeding practices among respondents. Many mothers reported that traditional beliefs discouraged exclusive breastfeeding within their communities. Such beliefs often promote practices such as giving water, herbal mixtures, or early complementary foods to infants. Similar findings have been reported in Nigerian studies where misconceptions regarding breast milk sufficiency negatively affected breastfeeding practices (Agunbiade & Ogunleye, 2012). Across Africa, traditional beliefs and cultural norms have similarly been identified as barriers to exclusive breastfeeding in countries such as Ethiopia and Tanzania (Setegn et al., 2012). Globally, cultural perceptions surrounding infant feeding continue to influence breastfeeding practices, particularly where traditional beliefs conflict with modern healthcare recommendations (Victora et al., 2016). Addressing these misconceptions through culturally sensitive health education programs is therefore necessary for improving breastfeeding practices.

Another important finding of this study was the significant association between attendance at breastfeeding counselling sessions and exclusive breastfeeding practices. Mothers who attended counselling sessions were more likely to exclusively breastfeed their infants. This may be because counselling sessions improve maternal knowledge, practical breastfeeding skills, and confidence in recommended breastfeeding behaviours. Similar findings have been reported in Nigeria where mothers who received breastfeeding education during antenatal care were more likely to practice exclusive breastfeeding (Ogbo et al., 2018). Studies conducted in several African countries have also shown that breastfeeding counselling significantly improves breastfeeding knowledge and practices among mothers (Sinha et al., 2015). Systematic reviews conducted globally have further demonstrated that breastfeeding counselling interventions are effective strategies for improving exclusive breastfeeding rates (McFadden et al., 2017). These findings support the integration of breastfeeding counselling into routine maternal and child healthcare services.

Interestingly, socio-demographic variables such as maternal age, education level, marital status, and income were not significantly associated with exclusive breastfeeding practices in this study. This finding suggests that structural and socio-cultural factors such as workplace conditions, family support, and cultural influences may play a greater role in shaping breastfeeding behaviours among working mothers in Kano Municipal. Similar findings have been reported in Nigerian studies where socio-cultural factors were stronger predictors of breastfeeding practices than maternal socio-demographic characteristics (Ogbo et al., 2015). These findings indicate that interventions aimed at improving breastfeeding practices should address broader social, cultural, and workplace environments in addition to individual maternal characteristics.

Conclusion

This study assessed the prevalence and determinants of exclusive breastfeeding and complementary feeding practices among working mothers in Kano Municipal Local Government Area, Kano State, Nigeria. The findings revealed that slightly more than half of the respondents practiced exclusive breastfeeding for six months, while only a small proportion introduced complementary feeding at the recommended age. Workplace support, family encouragement, cultural beliefs, elder influence, and breastfeeding counselling were identified as significant determinants of exclusive breastfeeding practices.

The study highlights the persistent challenges faced by working mothers in maintaining optimal infant feeding practices. Workplace constraints and socio-cultural influences continue to affect adherence to recommended breastfeeding guidelines. Addressing these structural and social barriers is essential for improving exclusive breastfeeding practices and ensuring optimal infant nutrition and health outcomes.

Recommendations

Based on the findings of this study, the following recommendations are proposed:

1. **Strengthening workplace policies**

   Employers should implement breastfeeding-friendly workplace policies, including provision of breastfeeding breaks, lactation rooms, and flexible work schedules to enable working mothers to continue breastfeeding effectively.

2. **Expansion of breastfeeding education programs**

   Health authorities should strengthen breastfeeding counselling during antenatal and postnatal care to improve maternal knowledge and support adherence to recommended infant feeding practices.

3. **Community-based awareness campaigns**

   Community health education programs should address cultural misconceptions surrounding breastfeeding and complementary feeding, particularly beliefs that discourage exclusive breastfeeding.

4. **Promotion of family support**

   Programs that engage fathers, grandmothers, and other family members should be implemented to encourage supportive family environments for breastfeeding mothers.

5. **Policy enforcement**

   Government agencies should strengthen enforcement of maternity protection policies that support breastfeeding among working women.

Strengths and Limitations of the Study

This study has several strengths. The use of a multistage sampling technique improved the representativeness of the study population. In addition, interviewer-administered questionnaires contributed to the high response rate and minimized missing data.

However, certain limitations should be acknowledged. First, the cross-sectional design limits the ability to establish causal relationships between identified determinants and breastfeeding practices. Second, the study relied on self-reported information, which may be subject to recall bias or social desirability bias. Furthermore, the study was conducted in an urban setting, and the findings may not be fully generalizable to rural populations with different socio-cultural and economic characteristics.

Despite these limitations, the study provides valuable insights into factors influencing exclusive breastfeeding and complementary feeding practices among working mothers in Kano Municipal.

Data Availability Statement

The datasets generated and analyzed during the current study are available from the corresponding author upon reasonable request.

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Conflict of Interest Statement

The authors declare no competing financial interests or personal relationships that could have influenced this work.

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