



Maternal Health Literacy and Exclusive Breastfeeding Intention: A Theory of Planned Behaviour Study in Antenatal Care

Abiola Adiat Omokhabi

Department of Adult Education, Faculty of Education, University of Ibadan, Oyo State, Nigeria.

*Corresponding Author e-mail: aa.omokhabi@ui.edu.ng

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Abstract: This study examined the joint and independent contributions of maternal health literacy, attitudes toward exclusive breastfeeding, subjective norms, and perceived behavioural control to exclusive breastfeeding intention among pregnant women attending antenatal care in Ibadan North Local Government Area, Nigeria. The study extended the Theory of Planned Behaviour by incorporating maternal health literacy as an additional cognitive predictor. A facility-based cross-sectional survey was conducted among 181 third-trimester pregnant women recruited through convenience sampling from three Primary Health Centres in Idi-Ogugu (Agodi-Gate), Agbowo, and Oke-Apon (Yemetu). Data were collected from July to December 2025 using a modified Maternal Health Literacy and Pregnancy Outcome Questionnaire, Theory of Planned Behaviour-based measures, and the Infant Feeding Intentions Scale. Descriptive statistics and multiple linear regression were used for analysis. Participants had a low level of maternal health literacy, with an overall weighted mean of 1.98. The regression model was statistically significant ($R = 0.455$, $R^2 = 0.207$, adjusted $R^2 = 0.189$, $F(4,176) = 11.467$, $p < 0.001$) and explained 20.7% of the variance in exclusive breastfeeding intention. Maternal health literacy ($\beta = 0.345$, $p = 0.002$) and attitudes toward exclusive breastfeeding ($\beta = 0.210$, $p = 0.033$) were significant positive predictors, whereas subjective norms and perceived behavioural control were not significant independent predictors. These findings highlight the importance of strengthening maternal health literacy and promoting favourable breastfeeding attitudes through accessible, culturally appropriate antenatal education.

Keywords: Maternal health literacy; exclusive breastfeeding intention; theory of planned behaviour; antenatal care; pregnant women

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INTRODUCTION

Health literacy (HL) is a conceptual construct encompassing the competencies and skills required to access, understand, process, evaluate, and use health-related information to make informed health decisions (Liu et al., 2020). It enables individuals to participate actively in maintaining their health and to use healthcare services effectively. Conversely, limited health literacy is associated with adverse health outcomes, underscoring its importance as a determinant of health and well-being (Liu et al., 2020). During pregnancy, adequate health literacy is particularly important because it supports informed decisions regarding antenatal care, maternal nutrition, infant feeding, disease prevention, and other health behaviours that may influence pregnancy outcomes and maternal and child health (Nawabi et al., 2021; Salako et al., 2025).

Women's reproductive health is especially dependent on health literacy (Kilfoyle et al., 2016). In obstetric and gynaecological contexts, this concept is commonly referred to as maternal health literacy (MHL). Maternal health literacy describes a mother's capacity to seek, understand, evaluate, and use information concerning maternal and child health in ways that may help reduce maternal and child morbidity and mortality (Phommachanh et al., 2021). Pregnancy-related maternal health literacy is particularly relevant because it has implications for both the expectant mother and

the developing fetus (Mojoyinola, 2011). More broadly, maternal health literacy encompasses the knowledge and skills that enable women to access, comprehend, assess, and apply information concerning their own health and well-being and that of their infants (Nutbeam, McGill, & Premkumar, 2018).

Exclusive breastfeeding (EBF) is an important maternal and child health behaviour that may be influenced by maternal health literacy. Breastfeeding intention formed during pregnancy is considered a strong predictor of breastfeeding initiation, duration, and continuation (Yakubu et al., 2023). Stronger prenatal breastfeeding intention is also associated with a greater likelihood of practising exclusive breastfeeding after childbirth (Moimaz et al., 2017). Exclusive breastfeeding refers to feeding an infant only breast milk during the first six months of life, without introducing any other food or liquid, including water. During this period, breast milk provides the nutrients and energy required for optimal infant growth and development (Akadri & Odelola, 2020).

Breastfeeding is among the most effective interventions for promoting infant survival, growth, and development. Human colostrum, the first milk produced after childbirth, contains immunoglobulins and growth factors that provide passive immunity and support neonatal development (Kim & Yi, 2020). Breastfed infants have a lower risk of infection and may experience benefits related to nutrition, neurodevelopment, and mother–infant bonding (Horta et al., 2015; Cacho & Lawrence, 2017; Modak, Ronghe, & Gomase, 2023). Breastfeeding also benefits mothers by reducing the risks of postpartum haemorrhage, postpartum depression, type 2 diabetes, ovarian cancer, and breast cancer (Masi & Stewart, 2024). In contrast, failure to practise exclusive breastfeeding is associated with increased risks of illness, mortality, malnutrition, and impaired development among infants (Bhandari et al., 2019; Kebede et al., 2020; Armdie et al., 2024).

Despite these established benefits, exclusive breastfeeding rates remain below recommended levels worldwide. The World Health Organization reported that fewer than 40% of infants younger than six months were exclusively breastfed globally (WHO, 2014). Although progress has subsequently been reported, exclusive breastfeeding remains suboptimal, particularly in low- and middle-income countries (Ejje et al., 2021; WHO, 2023). In sub-Saharan Africa, approximately 37% of infants younger than six months are exclusively breastfed, despite the widespread practice of breastfeeding across the region (Ogbo et al., 2017).

In Nigeria, breastfeeding initiation is nearly universal, yet exclusive breastfeeding remains relatively uncommon. According to the 2018 Nigeria Demographic and Health Survey, only 29% of infants younger than six months were exclusively breastfed (NPC & ICF, 2019). Non-adherence to exclusive breastfeeding recommendations has been associated with increased childhood morbidity and mortality, particularly from diarrhoea and other preventable diseases (Ogbo, Page, & Agho, 2015; Ogbo, Agho, & Page, 2015). This issue is therefore highly relevant to primary healthcare delivery in settings such as Ibadan North Local Government Area, where antenatal clinics provide strategic opportunities to strengthen maternal health literacy and promote recommended infant-feeding practices (Ibor et al., 2011).

Several health-behaviour theories may help explain breastfeeding intentions and practices (Health Promotion and Disease Prevention Theories and Models, 2024). Among them, the Theory of Planned Behaviour (TPB) has been widely applied to predict breastfeeding intention and exclusive breastfeeding behaviour across different populations (Guo et al., 2016; Esquerra-Zwiers, Goris, & Franzen, 2022). The TPB proposes that behavioural intention is the most proximal predictor of behaviour and is

determined by three principal constructs: attitude toward the behaviour, subjective norms, and perceived behavioural control (Ajzen, 1991). In the context of exclusive breastfeeding, attitude refers to a woman's positive or negative evaluation of the practice. Subjective norms reflect the perceived social expectations or pressures of significant others, whereas perceived behavioural control refers to the perceived ease or difficulty of practising exclusive breastfeeding in the presence of potential barriers. The theory further proposes that behavioural, normative, and control beliefs shape these constructs, which subsequently influence behavioural intention and behaviour when sufficient control is available (Bosnjak, Ajzen, & Schmidt, 2020; Al-Jawaldeh et al., 2025).

Although the TPB provides a robust framework for explaining breastfeeding intention, it does not explicitly incorporate maternal health literacy. In the present study, maternal health literacy was conceptualised as an independent cognitive predictor that complements the conventional TPB constructs. Women with higher maternal health literacy may be better able to access, understand, evaluate, and apply information related to exclusive breastfeeding, thereby supporting informed decision-making during pregnancy. Accordingly, this study extended the TPB framework by examining whether maternal health literacy contributes to exclusive breastfeeding intention alongside attitude, subjective norms, and perceived behavioural control.

Previous evidence has linked maternal health literacy to improved maternal and child health behaviours and outcomes. Women with higher levels of maternal health literacy may be more capable of obtaining, understanding, and using health information effectively, which may contribute to improved health-information-seeking behaviour, appropriate postpartum contraceptive use, optimal breastfeeding practices, and reduced healthcare costs (Renkert & Nutbeam, 2001; Barnes et al., 2019; Stafford et al., 2021; Vila-Candel et al., 2021). These findings support the inclusion of maternal health literacy as an important cognitive factor in explaining exclusive breastfeeding intention.

Previous studies have investigated antenatal health literacy and its associated factors among pregnant women (Guler et al., 2021), examined the relationship between health literacy and exclusive breastfeeding during the postpartum period (Vila-Candel et al., 2021), assessed pregnant women's knowledge of antenatal care (Bello et al., 2022), and explored maternal health literacy, maternal healthcare utilisation, and pregnancy outcomes among recently delivered mothers (Elbarazi et al., 2024). However, the existing literature has generally examined maternal health literacy and breastfeeding behaviour separately, focused primarily on postpartum women, or failed to integrate maternal health literacy with the TPB to explain exclusive breastfeeding intention during pregnancy. In addition, limited empirical evidence is available regarding maternal health literacy and exclusive breastfeeding intention among pregnant women receiving antenatal services in primary healthcare facilities in Ibadan North Local Government Area.

This study addressed these gaps by integrating maternal health literacy into the TPB framework and examining exclusive breastfeeding intention among pregnant women attending selected primary healthcare facilities in Ibadan North Local Government Area, Oyo State, Nigeria. Specifically, the study aimed to: (a) determine the level of maternal health literacy among pregnant women attending antenatal care; (b) assess their attitudes, subjective norms, and perceived behavioural control regarding exclusive breastfeeding; (c) examine the joint and independent contributions of maternal health literacy, attitude, subjective norms, and perceived behavioural control to exclusive breastfeeding intention; and (d) identify the implications of the

findings for antenatal reproductive health education. Guided by the TPB, the study treated maternal health literacy as a complementary independent cognitive determinant and assessed the extent to which each predictor was associated with exclusive breastfeeding intention during pregnancy.

METHOD

Study Design and Setting

This facility-based cross-sectional study examined the association between maternal health literacy and exclusive breastfeeding intention among pregnant women attending antenatal care services. The Theory of Planned Behaviour (TPB) provided the theoretical framework, with maternal health literacy conceptualised as an independent cognitive predictor that complemented the core TPB constructs in explaining exclusive breastfeeding intention.

The study was conducted from July to December 2025 at three Primary Health Centres—Idi-Ogugu (Agodi-Gate), Agbowo, and Oke-Apon (Yemetu)—in the Ibadan North Local Government Area of Oyo State, Nigeria. These facilities were selected because they are among the major public health centres that routinely provide maternal and child health services, including antenatal care, delivery services, postnatal care, immunisation, outpatient care, laboratory services, and other primary healthcare services. Their relatively high antenatal attendance also provided adequate access to eligible participants.

Study Population, Eligibility Criteria, and Sampling

The study population comprised pregnant women in their third trimester who attended antenatal clinics at the selected Primary Health Centres during the study period. Convenience sampling was used to recruit eligible participants. All third-trimester pregnant women who met the eligibility criteria and provided informed consent were invited to participate. Women with medical or psychiatric conditions that could impair their ability to understand or complete the questionnaire were excluded.

A total of 191 questionnaires were distributed, of which 181 were completed adequately and included in the analysis, yielding a response rate of 94.8%. Although convenience sampling facilitated the recruitment of eligible participants in the clinical setting, it may limit the representativeness of the sample and the generalisability of the findings.

Study Instruments

1. Maternal health literacy

Maternal health literacy was assessed using a modified version of the Maternal Health Literacy and Pregnancy Outcome Questionnaire (MHLAPQ) developed by Mojinyinola (2011). The modified instrument contained 14 items, including 13 items from the original questionnaire and one additional item assessing knowledge of delivery settings with skilled birth attendants. This item was added because the use of skilled birth attendants is associated with reduced maternal mortality and improved infant survival (Akshaya & Shivalli, 2017; Ghanbari et al., 2020).

Examples of the items included “I am able to understand and interpret basic health information correctly” and “I know the difference between delivery sites with skilled and unskilled birth attendants.” Responses were rated on a four-point Likert scale: Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1). Four negatively worded items were reverse-scored before analysis so that higher scores consistently represented higher maternal health literacy. Total scores ranged from 14 to 56, with higher scores indicating greater maternal health literacy. For descriptive

interpretation, weighted mean scores were classified as very low (0.0–0.9), low (1.0–1.9), moderate (2.0–2.4), high (2.5–3.0), or very high (3.1–4.0). The scale demonstrated good internal consistency in the present study, with a Cronbach's alpha coefficient of 0.80.

2. Attitude toward exclusive breastfeeding

Attitude toward exclusive breastfeeding was assessed using a 16-item scale developed with reference to Ajzen's TPB questionnaire guidelines (Ajzen, 1991; 2002). The items assessed pregnant women's overall evaluations and dispositions toward exclusive breastfeeding, including perceived nutritional and health benefits, emotional responses, behavioural commitment, and motivation.

Examples included "Exclusive breastfeeding offers the best nutrition for my child," "Exclusive breastfeeding prevents infections and diseases among infants," and "I am ready to face any challenge in order to breastfeed exclusively." Responses were rated on a four-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (4). Total scores ranged from 16 to 64, with higher scores indicating a more favourable attitude toward exclusive breastfeeding. Weighted mean scores of 0.0–2.4 were interpreted as indicating a negative attitude, whereas scores of 2.5–4.0 indicated a positive attitude. Bello et al. (2022) reported a Cronbach's alpha coefficient of 0.822 for a 14-item version of the scale. In the present study, the 16-item scale had a Cronbach's alpha coefficient of 0.80.

3. Subjective norms

Subjective norms regarding exclusive breastfeeding were assessed using a 16-item questionnaire developed in accordance with Ajzen's TPB guidelines (Ajzen, 1991; 2002) and adapted to the study context. The instrument assessed participants' perceptions of the expectations and approval of important referents, including family members, friends, healthcare professionals, community members, and religious or cultural groups.

Sample items included "My family will be pleased if I practise exclusive breastfeeding," "My healthcare provider believes I should practise exclusive breastfeeding," and "I come from a culture that supports exclusive breastfeeding." Responses were rated on a four-point Likert scale: Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1). Total scores ranged from 16 to 64, with higher scores indicating stronger perceived social support for exclusive breastfeeding. Weighted mean scores of 0.0–2.4 were interpreted as negative subjective norms, whereas scores of 2.5–4.0 were interpreted as positive subjective norms. The scale demonstrated good internal consistency, with a Cronbach's alpha coefficient of 0.85.

4. Perceived behavioural control

Perceived behavioural control related to exclusive breastfeeding was assessed using a 16-item scale developed with reference to Ajzen's TPB questionnaire guidelines (Ajzen, 1991; 2002). The scale covered four domains: confidence in one's ability to breastfeed, perceived control over the breastfeeding environment, ability to overcome breastfeeding-related challenges, and internal motivation.

Examples of the items included "I am confident in my ability to breastfeed exclusively," "I have control over creating a comfortable place for breastfeeding," and "I can balance breastfeeding with other responsibilities, such as work or childcare." Participants responded using a four-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (4). Total scores ranged from 16 to 64, with higher scores indicating greater perceived behavioural control over exclusive breastfeeding. For descriptive interpretation, weighted mean scores of 0.0–2.4 indicated low perceived

behavioural control, whereas scores of 2.5–4.0 indicated high perceived behavioural control. The scale demonstrated good internal consistency in the present study, with a Cronbach's alpha coefficient of 0.81.

5. Exclusive breastfeeding intention

Exclusive breastfeeding intention was assessed using the Infant Feeding Intentions (IFI) Scale developed by Nommsen-Rivers and Dewey (2009). The IFI Scale is a psychometrically validated instrument designed to assess a mother's intention to initiate breastfeeding and continue exclusive breastfeeding during the first six months after childbirth. The instrument has demonstrated satisfactory construct validity across different population groups (Nommsen-Rivers et al., 2010; Yehya et al., 2017).

The scale comprises five items, each rated on a five-point response scale ranging from Strongly Disagree (0) to Strongly Agree (4). Item 1 was reverse-coded in accordance with the original scoring guidelines. The first two items assessed the intention to initiate breastfeeding, whereas Items 3, 4, and 5 assessed the intention to breastfeed exclusively at one, three, and six months, respectively.

The total IFI score ranged from 0 to 16, with higher scores indicating a stronger intention to practise exclusive breastfeeding during the first six months postpartum. Following the scoring procedure described by Nommsen-Rivers and Dewey (2009), the rounded mean of the first two items was added to the scores for Items 3, 4, and 5. The scale demonstrated good internal consistency in the present study, with a Cronbach's alpha coefficient of 0.81.

Data Collection Procedure

Data were collected from July to December 2025 after ethical approval had been obtained and participants had provided written informed consent. The researcher distributed the questionnaires to eligible third-trimester pregnant women attending antenatal clinics at the three selected Primary Health Centres. The questionnaires were self-administered, although attending nurses provided clarification to participants who required assistance. Participants completed the questionnaires in a private area within the antenatal clinics to protect confidentiality and minimise distractions. Each questionnaire required approximately 10 minutes to complete and was collected immediately after completion. Of the 191 questionnaires distributed, 181 were sufficiently complete and eligible for analysis.

Ethical Considerations

Ethical approval was obtained from the Oyo State Ministry of Health in May 2025 under approval number NHREC/OYOSHRIEC/10/11/22. Written informed consent was obtained from all participants before data collection. Participants were informed that participation was voluntary, that they could decline or withdraw without penalty, and that their decision would not affect the healthcare services they received. Confidentiality and privacy were maintained throughout the data-collection process.

Statistical Analysis

Data were coded and analysed using IBM SPSS Statistics, version 27. Frequencies and percentages were used to summarise participants' sociodemographic and obstetric characteristics. Means, standard deviations, and weighted mean scores were used to describe maternal health literacy, attitude toward exclusive breastfeeding, subjective norms, perceived behavioural control, and exclusive breastfeeding intention. Weighted mean scores were interpreted using the predetermined decision criteria for each scale.

Multiple linear regression analysis was conducted to examine the joint and independent contributions of maternal health literacy, attitude toward exclusive breastfeeding, subjective norms, and perceived behavioural control to exclusive breastfeeding intention. Statistical significance was set at $p < 0.05$. Before the regression analysis was performed, the assumptions of linearity, normality of residuals, homoscedasticity, independence of errors, absence of influential outliers, and absence of multicollinearity were assessed. Multicollinearity was evaluated using variance inflation factor and tolerance values.

RESULTS AND DISCUSSION

Socio-demographic and Obstetric Characteristics

Table 1 presents the socio-demographic and obstetric characteristics of the 181 respondents. Most respondents were aged 23–26 years (44.2%), followed by those aged ≥ 27 years (32.0%) and 19–22 years (23.8%). Regarding religious affiliation, 53.6% were Christians, 43.6% were Muslims, and 2.8% belonged to other religious groups. Most respondents were Yoruba (69.1%), whereas 16.0% were Hausa, 9.9% were Igbo, and 5.0% were Edo.

In terms of occupation, 43.6% of the respondents were self-employed, 26.0% were traders, 18.2% were unemployed, and 12.2% were professionals. Almost half of the respondents (48.1%) reported a monthly income of ₦50,000–₦100,000, while 27.1% earned ₦101,000–₦150,000, 14.4% earned ₦151,000–₦200,000, and 10.5% earned at least ₦201,000. Most respondents had one or two children (65.7%), whereas 34.3% had three or more children.

Regarding educational attainment, 37.0% had completed primary education, 18.2% had completed secondary education, 15.5% held a National Certificate in Education or Ordinary National Diploma, and 12.7% had no primary education. In addition, 10.0% held a Higher National Diploma or first degree, while 6.6% had a postgraduate degree. Regarding gestational age, 40.9% of respondents were at 28–31 weeks of gestation, 34.3% were at 32–35 weeks, and 24.8% were at ≥ 36 weeks.

Table 1. Socio-demographic and Obstetric Characteristics of the Respondents

Characteristic	Category	Frequency	Percentage (%)
Age (years)	19–22	43	23.8
	23–26	80	44.2
	≥ 27	58	32.0
Religion	Christianity	97	53.6
	Islam	79	43.6
	Others	5	2.8
Ethnicity	Yoruba	125	69.1
	Hausa	29	16.0
	Igbo	18	9.9
	Edo	9	5.0
Occupation	Unemployed	33	18.2
	Self-employed	79	43.6
	Trader	47	26.0
	Professional	22	12.2
Monthly income (₦)	$\geq 201,000$	19	10.5
	151,000–200,000	26	14.4
	101,000–150,000	49	27.1
	50,000–100,000	87	48.1

Characteristic	Category	Frequency	Percentage (%)
Number of children	1–2	119	65.7
	≥3	62	34.3
Education	No primary education	23	12.7
	Primary education	67	37.0
	Secondary education	33	18.2
	NCE/OND	28	15.5
	HND/first degree	18	10.0
	Postgraduate degree	12	6.6
Gestational age (weeks)	28–31	74	40.9
	32–35	62	34.3
	≥36	45	24.8

Maternal Health Literacy

As shown in Table 2, the respondents had an overall weighted mean maternal health literacy score of 1.98. Because this score fell below the predefined cut-off of 2.00, maternal health literacy was classified as low according to the study's operational criteria. Negatively worded items were reverse-coded before the overall score was calculated, ensuring that higher scores consistently represented higher maternal health literacy.

This finding indicates that the respondents had relatively limited knowledge and skills for accessing, understanding, evaluating, and applying maternal health information. The result is broadly consistent with previous research among pregnant women. Phommachanh et al. (2021), for example, reported that more than 80% of women had inadequate maternal health literacy. By contrast, Vila-Candel et al. (2021) found that only 10% of respondents had inadequate health literacy, suggesting that maternal health literacy may vary substantially across populations and healthcare settings. Low maternal health literacy has also been associated with poorer health-related decision-making and a reduced capacity to make informed choices concerning maternal and child health during pregnancy, childbirth, and the postpartum period (Dadipoor et al., 2017).

Table 2. Maternal health literacy among pregnant women attending antenatal care services

S/N	Item	SA, n (%)	A, n (%)	SD, n (%)	D, n (%)	Mean	SD	Interpretation
1	I cannot search for health information in a library or on the internet.	119 (65.7)	51 (28.2)	5 (2.8)	6 (3.3)	1.44	0.71	Disagree
2	I can accurately understand and interpret basic health information.	75 (41.4)	64 (35.4)	11 (6.1)	31 (17.1)	1.99	1.08	Agree
3	I cannot accurately read, understand, and interpret medical prescriptions or instructions.	109 (60.2)	61 (33.7)	7 (3.9)	4 (2.2)	1.52	0.96	Disagree
4	I cannot read and understand the dates of medical appointments, such as immunisation, screening, or physical examination appointments.	52 (28.7)	62 (34.3)	32 (17.7)	35 (19.3)	2.28	1.08	Agree
5	I have a basic understanding of medical terminology.	76 (42.0)	53 (29.3)	35 (19.3)	17 (9.4)	1.96	0.99	Disagree
6	I can correctly read and understand health pamphlets.	82 (45.3)	55 (30.4)	12 (6.6)	32 (17.7)	1.97	1.11	Disagree

S/N	Item	SA, n (%)	A, n (%)	SD, n (%)	D, n (%)	Mean	SD	Interpretation
7	I have adequate knowledge of appropriate diets during pregnancy and after delivery.	87 (48.1)	55 (30.4)	21 (11.6)	18 (9.9)	1.83	0.99	Disagree
8	I cannot read and understand pregnancy danger signs, such as anaemia, pallor, elevated blood pressure, swelling, bleeding, or preterm labour.	39 (21.5)	45 (24.9)	56 (30.9)	41 (22.7)	2.54	1.06	Agree
9	I can read, write, and perform basic numerical calculations.	67 (37.0)	65 (35.9)	19 (10.5)	30 (16.6)	2.06	1.07	Agree
10	I can read, understand, and appropriately act on healthcare information.	67 (37.0)	79 (43.6)	15 (8.3)	20 (11.0)	1.93	0.95	Disagree
11	I have adequate knowledge and skills to care for my baby after delivery, including breastfeeding and bathing.	55 (30.4)	77 (42.5)	21 (11.6)	28 (15.5)	2.12	1.01	Agree
12	I can read health pamphlets and acquire the information and skills required to maintain personal and food hygiene during pregnancy and after delivery.	74 (40.9)	77 (42.5)	10 (5.5)	20 (11.0)	1.87	0.95	Disagree
13	I understand the difference between delivery facilities with skilled birth attendants and those without skilled birth attendants.	52 (28.7)	73 (40.3)	28 (15.5)	28 (15.5)	2.18	1.01	Agree
14	I have adequate skills to prepare a balanced diet.	70 (38.7)	71 (39.2)	13 (7.2)	27 (14.9)	1.98	1.03	Agree

Weighted mean = 1.98

Note: Items 1, 3, 4, and 8 were negatively worded and reverse-coded before the overall maternal health literacy score was calculated. Higher scores indicate higher maternal health literacy. SA = Strongly Agree; A = Agree; SD = Strongly Disagree; D = Disagree.

Decision criteria: Very low = 0.0–0.9; low = 1.0–1.9; moderate = 2.0–2.4; high = 2.5–3.0; very high = 3.1–4.0.

Exclusive Breastfeeding Intention

Table 3 presents the respondents' intentions to practise exclusive breastfeeding. The overall weighted mean was 2.15, indicating a relatively low intention to practise exclusive breastfeeding. The duration-specific items showed a gradual decline in intention over time. The mean intention score was 2.25 for exclusive breastfeeding at one month, 2.22 at three months, and 1.88 at six months. These findings suggest that although some respondents expressed an initial willingness to breastfeed, their intention to sustain exclusive breastfeeding throughout the recommended six-month period was comparatively weak.

This result differs from that of Silva et al. (2023), who reported stronger exclusive breastfeeding intentions among pregnant women and found that such intentions were associated with structural, healthcare-setting, and individual-level factors. The differences may reflect variations in study setting, access to maternal healthcare, socio-economic characteristics, and the intensity of breastfeeding-promotion activities.

The present finding also contrasts with Ibrahim et al. (2023), who reported that 56.3% of participants had a high intention to practise exclusive breastfeeding. The stronger intention observed in that study may have been related to differences in maternal health knowledge, breastfeeding support, antenatal education, or other contextual factors that promote positive infant-feeding intentions. However, the present

finding is consistent with Olubayo and Samuel (2025), who reported that participants with poor knowledge of exclusive breastfeeding were significantly more likely to have a poor intention to practise it than those with good knowledge (AOR = 5.543, 95% CI = 2.503–12.272, $p < 0.001$). Collectively, these findings underscore the importance of strengthening maternal knowledge through effective antenatal education, breastfeeding counselling, and supportive family and healthcare systems.

Table 3. Exclusive Breastfeeding Intention among pregnant women

S/N	Statement	SA, n (%)	A, n (%)	D, n (%)	SD, n (%)	Mean	SD	Interpretation
1	I plan to feed my baby only formula and not breastfeed at all.	72 (39.8)	28 (15.5)	40 (22.1)	41 (22.7)	2.27	1.20	Agree
2	I plan to at least try breastfeeding.	57 (31.5)	73 (40.3)	31 (17.1)	20 (11.0)	2.13	1.04	Disagree
3	When my baby is one month old, I will breastfeed without offering formula or any other milk.	43 (23.8)	76 (42.0)	26 (14.4)	36 (19.9)	2.24	0.97	Agree
4	When my baby is three months old, I will breastfeed without offering formula or any other milk.	53 (29.3)	68 (37.0)	33 (18.2)	27 (14.9)	2.22	1.06	Agree
5	When my baby is six months old, I will breastfeed without offering formula or any other milk.	80 (44.2)	61 (33.7)	18 (9.9)	22 (12.2)	1.87	0.97	Disagree

Weighted mean = 2.15

Attitudes towards Exclusive Breastfeeding

As shown in Table 4, the respondents generally had an unfavourable attitude towards exclusive breastfeeding. The overall weighted mean was 1.78, which was below the predefined threshold of 2.50 for a positive attitude. Most item-level means were also below this threshold, indicating limited recognition of the nutritional, health, emotional, and practical benefits of exclusive breastfeeding.

This finding differs from those of Chekol Abebe et al. (2022) and Sokan-Adeaga et al. (2023), who reported relatively favourable attitudes towards exclusive breastfeeding among pregnant and lactating women. However, it is consistent with Naja et al. (2022), who found that only a relatively small proportion of participants had positive attitudes towards exclusive breastfeeding. Differences across studies may be attributable to variations in participants' socio-cultural beliefs, exposure to health education, access to breastfeeding information, and knowledge of the benefits of breastfeeding. The low attitude score observed in the present study indicates a need to strengthen antenatal education programmes that address misconceptions and improve pregnant women's perceptions of exclusive breastfeeding.

Table 4. Attitudes of pregnant women attending antenatal care services towards exclusive breastfeeding

S/N	Statement	SD, n (%)	D, n (%)	A, n (%)	SA, n (%)	Mean	SD	Interpretation
1	Exclusive breastfeeding provides optimal nutrition for my baby	136 (75.1)	38 (21.0)	7 (3.9)	0 (0.0)	1.32	0.67	Negative
2	Exclusive breastfeeding helps prevent infections and diseases in infants	88 (48.6)	59 (32.6)	22 (12.2)	12 (6.6)	2.05	0.36	Negative
3	Exclusive breastfeeding promotes bonding between mother and baby	103 (56.9)	42 (23.2)	17 (9.4)	19 (10.5)	1.72	0.99	Negative
4	Exclusive breastfeeding is convenient and saves time	96 (53.0)	37 (20.4)	29 (16.0)	19 (10.5)	1.89	1.12	Negative

S/N	Statement	SD, n (%)	D, n (%)	A, n (%)	SA, n (%)	Mean	SD	Interpretation
5	I will feel happy and fulfilled when I breastfeed exclusively	109 (60.2)	41 (22.7)	20 (11.0)	11 (6.1)	1.68	1.00	Negative
6	Exclusive breastfeeding will make me feel closer to my baby	138 (76.2)	33 (18.2)	9 (5.0)	1 (0.6)	1.34	0.73	Negative
7	I may feel anxious or stressed if I experience difficulties with exclusive breastfeeding	80 (44.2)	67 (37.0)	24 (13.3)	10 (5.5)	1.88	1.01	Negative
8	Exclusive breastfeeding will give me a sense of pride and accomplishment	88 (48.6)	50 (27.6)	17 (9.4)	26 (14.4)	1.85	0.99	Negative
9	Exclusive breastfeeding is recommended by healthcare professionals	101 (55.8)	32 (17.7)	26 (14.4)	22 (12.2)	1.85	1.11	Negative
10	Exclusive breastfeeding reduces the risk of breast and ovarian cancer	101 (55.8)	40 (22.1)	22 (12.2)	18 (9.9)	1.78	1.05	Negative
11	Exclusive breastfeeding promotes uterine contraction and postpartum recovery	96 (53.0)	43 (23.8)	16 (8.8)	26 (14.4)	1.79	0.99	Negative
12	Exclusive breastfeeding supports healthy brain development in infants	102 (56.4)	37 (20.4)	26 (14.4)	16 (8.8)	1.81	1.09	Negative
13	I intend to breastfeed exclusively for the first six months	88 (48.6)	41 (22.7)	27 (14.9)	25 (13.8)	1.95	1.11	Negative
14	I plan to seek assistance from a lactation consultant if I experience difficulties with exclusive breastfeeding	97 (53.6)	42 (23.2)	21 (11.6)	21 (11.6)	1.80	1.03	Negative
15	I am willing to overcome challenges to breastfeed exclusively	87 (48.1)	48 (26.5)	22 (12.2)	24 (13.3)	1.89	1.05	Negative
16	I will prioritise exclusive breastfeeding over other activities	92 (50.8)	44 (24.3)	27 (15.0)	18 (9.9)	1.88	1.09	Negative

Weighted mean = 1.78

Decision criteria: Negative attitude = 0.0–2.4; positive attitude = 2.5–4.0.

Note: Responses were coded as Strongly Agree = 4, Agree = 3, Disagree = 2, and Strongly Disagree = 1. Higher mean scores indicate a more favourable attitude towards exclusive breastfeeding. Negatively phrased items should be reverse-coded before the composite score is calculated.

Subjective Norms concerning Exclusive Breastfeeding

Table 5 shows that the overall subjective-norm score was low, with a weighted mean of 1.87. This finding indicates limited perceived social pressure or normative support for exclusive breastfeeding from important referents, including family members, friends, healthcare professionals, community members, and religious or cultural leaders. Although respondents reported some item-level support, the overall score suggests that exclusive breastfeeding was not strongly reinforced across their social environments.

Subjective norms are shaped by the perceived expectations and approval of influential individuals and groups, such as family members, community figures, and healthcare professionals (Atika et al., 2018). Family influence is particularly important because maternal health behaviours are often embedded within household relationships and shared infant-feeding beliefs. For example, maternal grandmothers' previous breastfeeding experiences may shape current subjective norms and influence mothers' infant-feeding decisions (Bartle & Harvey, 2017). Proactive support from grandmothers has also been associated with a reduction in inappropriate infant-

feeding practices, including the early introduction of pacifiers (Muelbert & Giugliani, 2018).

Support from husbands, grandmothers, and peers may strengthen favourable maternal attitudes and encourage sustained exclusive breastfeeding (Rostamkhan et al., 2020). Within the Theory of Planned Behaviour, subjective norms contribute to behavioural intention alongside attitudes and perceived behavioural control (Ajzen, 1991). Consequently, limited normative support may indirectly weaken women's confidence in their ability to manage breastfeeding challenges. Low breastfeeding self-efficacy may reduce mothers' ability to address difficulties such as poor infant attachment, perceived insufficient milk supply, pain, and competing responsibilities. Conversely, greater self-efficacy may support continued exclusive breastfeeding despite postpartum challenges.

Previous evidence further demonstrates the importance of addressing both social and psychological determinants of breastfeeding. Antenatal education and counselling can improve maternal confidence and persistence. In Riyadh, for example, 37% of pregnant women reported high confidence in their ability to maintain exclusive breastfeeding for the intended duration (Alnasser et al., 2018). Strengthening antenatal services may therefore improve both perceived normative support and maternal confidence in exclusive breastfeeding.

Table 5. Subjective norms concerning exclusive breastfeeding among pregnant women attending antenatal care services

Domain	S/N	Statement	SA, n (%)	A, n (%)	SD, n (%)	D, n (%)	Mean	SD	Interpretation
Family and friends	1	Most people who are important to me think that I should breastfeed exclusively.	115 (63.5)	48 (26.5)	4 (2.2)	14 (7.7)	1.54	0.87	Disagree
	2	My family would be pleased if I breastfed exclusively.	51 (28.2)	89 (49.2)	14 (7.7)	27 (14.9)	2.09	0.98	Agree
	3	My friends believe that exclusive breastfeeding is the best choice.	57 (31.5)	69 (38.1)	26 (14.4)	29 (16.0)	2.15	1.04	Agree
	4	The people I respect most would approve of my decision to breastfeed exclusively.	65 (35.9)	70 (38.7)	25 (13.8)	21 (11.6)	2.10	1.71	Agree
Healthcare providers	1	My healthcare provider thinks that I should breastfeed exclusively.	80 (44.2)	76 (42.0)	15 (8.3)	10 (5.5)	1.75	0.83	Disagree
	2	My doctor recommends exclusive breastfeeding for the first six months.	78 (43.1)	60 (33.1)	22 (12.2)	21 (11.6)	1.92	1.00	Agree
	3	The nurses at my hospital encourage exclusive breastfeeding.	72 (39.8)	71 (39.2)	11 (6.1)	27 (14.9)	1.96	1.03	Agree
	4	My healthcare provider would support me if I experienced difficulties with exclusive breastfeeding.	100 (55.2)	64 (35.4)	5 (2.8)	12 (6.6)	1.61	0.83	Disagree
Community and society	1	Most women in my community breastfeed exclusively.	61 (33.7)	71 (39.2)	23 (12.7)	26 (14.4)	2.07	1.01	Agree

Domain	S/N	Statement	SA, n (%)	A, n (%)	SD, n (%)	D, n (%)	Mean	SD	Interpretation
	2	Exclusive breastfeeding is widely accepted in my culture.	53 (29.3)	67 (37.0)	37 (20.4)	23 (12.8)	2.21	1.19	Agree
	3	The media promotes exclusive breastfeeding as the best feeding option.	63 (34.8)	71 (39.2)	20 (11.0)	27 (15.0)	2.05	1.02	Agree
	4	Society expects mothers to breastfeed exclusively for the first six months.	66 (36.5)	71 (39.2)	26 (14.4)	18 (9.9)	1.97	0.94	Agree
Religious and cultural influences	1	My religious beliefs encourage exclusive breastfeeding.	60 (33.1)	63 (34.8)	25 (13.8)	33 (18.3)	2.16	1.08	Agree
	2	My cultural traditions support exclusive breastfeeding.	64 (35.4)	65 (35.9)	17 (9.4)	35 (19.3)	2.16	1.09	Agree
	3	My spiritual leader recommends exclusive breastfeeding.	55 (30.4)	56 (30.9)	32 (17.7)	38 (21.0)	2.28	1.11	Agree
	4	My community's values emphasise the importance of exclusive breastfeeding.	66 (36.5)	53 (29.3)	29 (16.0)	33 (18.2)	2.15	1.10	Agree
Overall weighted mean = 1.87									

Perceived Behavioural Control regarding Exclusive Breastfeeding

As presented in Table 6, the respondents had a low overall level of perceived behavioural control regarding exclusive breastfeeding, with a weighted mean of 1.95. Within the Theory of Planned Behaviour, perceived behavioural control refers to the perceived ease or difficulty of performing a behaviour and encompasses confidence in one's ability to perform it and perceived control over facilitating or constraining circumstances (Ajzen, 1991; 2002).

Confidence in breastfeeding ability had the lowest subscale mean ($M = 1.84$), indicating that respondents lacked confidence in their ability to breastfeed exclusively for the recommended six months. Perceived control over the breastfeeding environment was also low ($M = 1.95$), suggesting limited confidence in respondents' ability to establish a supportive breastfeeding environment, obtain professional breastfeeding assistance, access necessary resources, and secure family support.

The ability to overcome breastfeeding challenges had a mean score of 2.00. This finding suggests that respondents had limited confidence in their ability to manage breastfeeding-related pain, respond to criticism, resolve common breastfeeding problems, and balance breastfeeding with work or childcare responsibilities. Internal motivation had the highest subscale mean ($M = 2.01$), although it remained within the low perceived behavioural control category. Thus, although respondents appeared to recognise some benefits of exclusive breastfeeding and expressed personal motivation, this motivation may not have been sufficient to strengthen their perceived capacity to breastfeed successfully.

The low level of perceived behavioural control may reflect inadequate antenatal preparation, limited practical breastfeeding support, poor confidence in managing breastfeeding challenges, and insufficient family or health-system support. These findings are consistent with the theoretical propositions of Ajzen (1991; 2002) and Armitage and Conner (2001), who identified perceived behavioural control as an important determinant of behavioural intention and behaviour. They also align

conceptually with Zhang et al. (2018), who reported that higher perceived behavioural control significantly predicted exclusive breastfeeding intention and practice. Antenatal interventions should therefore strengthen breastfeeding self-efficacy, improve access to professional support, and involve family members and healthcare providers in preparing mothers to initiate and sustain exclusive breastfeeding.

Table 6. Perceived behavioural control regarding exclusive breastfeeding among pregnant women attending antenatal care services

Domain	S/N	Statement	SA, n (%)	A, n (%)	SD, n (%)	D, n (%)	Mean	SD	Interpretation
Confidence in breastfeeding ability	1	I am confident in my ability to breastfeed exclusively	106 (58.6)	64 (35.4)	5 (2.8)	6 (3.3)	1.50	0.71	—
	2	I feel capable of overcoming breastfeeding challenges	51 (28.2)	98 (54.1)	15 (8.3)	17 (9.4)	1.98	0.86	—
	3	I am confident that I can breastfeed exclusively for the recommended six months	75 (41.4)	72 (39.8)	23 (12.7)	11 (6.1)	1.83	0.87	—
	4	I trust my body's ability to produce sufficient milk for my baby	70 (38.7)	65 (35.9)	19 (10.5)	27 (14.9)	2.01	1.04	—
Control over the breastfeeding environment	1	I can create a comfortable and private space for breastfeeding	83 (45.9)	68 (37.6)	9 (5.0)	21 (11.6)	1.82	0.97	—
	2	I can easily access lactation consultants or breastfeeding support services	60 (33.1)	70 (38.7)	16 (8.8)	35 (19.3)	2.14	1.08	—
	3	My family and friends support my decision to breastfeed exclusively	66 (36.5)	67 (37.0)	12 (6.6)	36 (19.9)	2.09	1.10	—
	4	I have the resources and equipment required to breastfeed exclusively	94 (51.9)	62 (34.3)	5 (2.8)	20 (11.0)	1.72	0.95	—
Ability to overcome challenges	1	I can manage pain or discomfort associated with breastfeeding	59 (32.6)	88 (48.6)	13 (7.2)	21 (11.6)	1.97	0.93	Agree
	2	I can cope with criticism or negative comments about breastfeeding	50 (27.6)	86 (47.5)	28 (15.5)	17 (9.4)	2.06	0.89	Agree
	3	I am confident in my ability to resolve common breastfeeding problems	55 (30.4)	76 (42.0)	19 (10.5)	31 (17.1)	2.14	1.03	Agree
	4	I can balance breastfeeding with other responsibilities, such as work or childcare	77 (42.5)	74 (40.9)	15 (8.3)	15 (8.3)	1.82	0.90	Disagree
Internal motivation	1	I want to breastfeed exclusively because it is best for my baby	60 (33.1)	70 (38.7)	25 (13.8)	26 (14.4)	2.09	1.02	Agree

Domain	S/N	Statement	SA, n (%)	A, n (%)	SD, n (%)	D, n (%)	Mean	SD	Interpretation
	2	I feel a strong emotional connection to breastfeeding	70 (38.7)	85 (47.0)	9 (5.0)	17 (9.4)	1.85	0.89	Disagree
	3	I am motivated to breastfeed exclusively because of its health benefits	51 (28.2)	82 (45.3)	19 (10.5)	29 (16.0)	2.14	1.00	Agree
	4	I want to breastfeed exclusively because it is a personal goal	70 (38.7)	72 (39.8)	17 (9.4)	22 (12.2)	1.95	0.98	Agree

Overall weighted mean = 1.95

Joint Contribution of the Predictor Variables

Table 7 presents the joint contribution of maternal health literacy, attitude towards exclusive breastfeeding, perceived behavioural control, and subjective norms to exclusive breastfeeding intention. The multiple correlation coefficient was $R = 0.455$, indicating a moderate positive relationship between the combined predictor variables and exclusive breastfeeding intention. The coefficient of determination was $R^2 = 0.207$, with an adjusted R^2 of 0.189. Thus, the four variables jointly accounted for 20.7% of the variance in exclusive breastfeeding intention. The remaining 79.3% may be attributable to factors not included in the model, such as socio-economic circumstances, previous breastfeeding experience, maternal employment, family support, cultural beliefs, healthcare access, and breastfeeding self-efficacy.

The overall regression model was statistically significant, $F(4,176) = 11.467$, $p < 0.001$. This result indicates that the four predictor variables were jointly associated with exclusive breastfeeding intention. It also supports the usefulness of integrating maternal health literacy into the Theory of Planned Behaviour framework when examining breastfeeding intention. Nevertheless, the moderate explanatory power of the model suggests that future research should incorporate a broader range of interpersonal, socio-economic, cultural, behavioural, and health-system factors.

Table 7. Joint contribution of maternal health literacy, attitude, perceived behavioural control, and subjective norms to exclusive breastfeeding intention

Model component	Sum of squares	df	Mean square	F	p-value
Regression	314.098	4	78.524	11.467	<0.001
Residual	1205.206	176	6.848		
Total	1519.304	180			

$R = 0.455$; $R^2 = 0.207$; adjusted $R^2 = 0.189$

Dependent variable: Exclusive breastfeeding intention.

Predictors: Maternal health literacy, attitude towards exclusive breastfeeding, perceived behavioural control, and subjective norms.

Independent Contributions of the Predictor Variables

Table 8 presents the independent contributions of maternal health literacy, attitude towards exclusive breastfeeding, perceived behavioural control, and subjective norms to exclusive breastfeeding intention. Maternal health literacy made a statistically significant positive contribution to exclusive breastfeeding intention ($B = 0.146$, $\beta = 0.345$, $t = 3.132$, $p = 0.002$). This finding indicates that higher maternal health literacy was associated with a stronger intention to breastfeed exclusively.

Attitude towards exclusive breastfeeding also made a statistically significant positive contribution to exclusive breastfeeding intention ($B = 0.064$, $\beta = 0.210$, $t = 2.154$, $p = 0.033$). Respondents with more favourable attitudes towards exclusive breastfeeding were therefore more likely to report stronger intentions to practise it.

By contrast, perceived behavioural control ($B = 0.025$, $\beta = 0.064$, $t = 0.430$, $p = 0.668$) and subjective norms ($B = 0.077$, $\beta = 0.222$, $t = 1.756$, $p = 0.081$) did not make statistically significant independent contributions after the other variables were controlled. Although the overall model was significant, only maternal health literacy and attitude independently predicted exclusive breastfeeding intention. Among the variables included in the model, maternal health literacy had the largest standardised regression coefficient and was therefore the strongest independent predictor.

Table 8. Independent contributions of maternal health literacy, attitude, perceived behavioural control, and subjective norms to exclusive breastfeeding intention

Predictor	B	Standard error	β	t	p-value	Zero-order correlation	Partial correlation	Part correlation
Constant	5.310	0.875	—	6.067	<0.001	—	—	—
Maternal health literacy	0.146	0.047	0.345	3.132	0.002	0.407	0.230	0.210
Attitude towards exclusive breastfeeding	0.064	0.030	0.210	2.154	0.033	0.201	0.160	0.145
Perceived behavioural control	0.025	0.058	0.064	0.430	0.668	0.372	0.032	0.029
Subjective norms	0.077	0.044	0.222	1.756	0.081	0.382	0.131	0.118

Dependent variable: Exclusive breastfeeding intention.

Interpretation of the Predictor Effects

The finding that maternal health literacy significantly predicted exclusive breastfeeding intention is consistent with Olubayo and Samuel (2025), who reported that respondents with poor knowledge of exclusive breastfeeding were significantly more likely to have a poor intention to practise it than respondents with good knowledge (AOR = 5.543, 95% CI = 2.503–12.272, $p < 0.001$). However, the present result differs from that of Silva et al. (2023), who found that stronger exclusive breastfeeding intention was associated with structural, healthcare-setting, and individual-level factors. One possible explanation is that women with greater maternal health literacy are better able to understand breastfeeding recommendations, evaluate relevant information, recognise the benefits of exclusive breastfeeding, and make informed infant-feeding decisions.

Attitude towards exclusive breastfeeding was also a significant predictor of exclusive breastfeeding intention. This finding supports the Theory of Planned Behaviour, which proposes that behavioural intention is shaped by an individual's attitude towards the behaviour, subjective norms, and perceived behavioural control (Ajzen, 1991). It is also consistent with previous studies reporting positive associations between maternal attitudes and breastfeeding intentions (Dukuzumuremyi et al., 2020; Parker et al., 2020; Ibrahim et al., 2023). Similarly, Huang et al. (2023) found that Theory of Planned Behaviour constructs predicted breastfeeding behaviour among mothers of preterm infants at six weeks postpartum. The present finding suggests that women who evaluate exclusive breastfeeding more favourably are more likely to intend to practise it.

Subjective norms and perceived behavioural control were not statistically significant independent predictors after maternal health literacy and attitude were included in the regression model. Although both variables had positive zero-order correlations with exclusive breastfeeding intention, their adjusted contributions were not statistically significant. Maternal health literacy and attitude may therefore have been more closely associated with intention in the present study population. These findings support antenatal interventions that improve women's ability to access and use maternal health information while addressing misconceptions and fostering favourable attitudes towards exclusive breastfeeding.

CONCLUSION

This study found that maternal health literacy among pregnant women attending antenatal care was relatively low. Nevertheless, maternal health literacy emerged as the strongest predictor of exclusive breastfeeding intention among the variables included in the model, underscoring its importance in shaping pregnant women's intention to breastfeed exclusively. Attitude toward exclusive breastfeeding was also a significant positive predictor, indicating that women with more favourable attitudes were more likely to report stronger intentions to practise exclusive breastfeeding. Although subjective norms and perceived behavioural control were positively associated with exclusive breastfeeding intention, neither variable made a statistically significant independent contribution to the regression model. These findings suggest that antenatal care programmes should prioritise the improvement of maternal health literacy and the development of positive attitudes toward exclusive breastfeeding. Integrating comprehensive, culturally appropriate education and counselling on exclusive breastfeeding, including its biological and maternal–infant health benefits, may strengthen exclusive breastfeeding intention among pregnant women.

RECOMMENDATION

The findings have important implications for maternal health education, antenatal care practice, and future research. Given the low level of maternal health literacy observed in this study and its strong association with exclusive breastfeeding intention, maternal health education within antenatal clinics should be strengthened. Health information should be presented in clear and accessible language, supported by culturally appropriate educational materials and interactive teaching strategies to improve comprehension and informed decision-making.

Because attitude toward exclusive breastfeeding was the second strongest predictor of intention, antenatal education should also address common misconceptions, challenge unfavourable beliefs, and reinforce the maternal and infant health benefits of exclusive breastfeeding. Health professionals should deliver consistent and practical breastfeeding messages during antenatal visits. Although subjective norms did not independently predict intention in the regression model, family and community support may still help create an enabling environment for breastfeeding. Therefore, breastfeeding education sessions involving husbands, family members, and community leaders may be beneficial. Antenatal programmes should also equip pregnant women with practical breastfeeding knowledge and skills to strengthen confidence and perceived behavioural control, including techniques for positioning, attachment, milk expression, and managing common breastfeeding difficulties.

At the policy level, national, state, and local Ministries of Health, health departments, and relevant regulatory agencies should consider integrating maternal

health literacy enhancement strategies into existing maternal and child health services. Strengthening community-based health literacy may contribute to improved exclusive breastfeeding practices and, ultimately, better maternal and infant health outcomes. Future studies should use longitudinal designs and more representative sampling methods to examine whether maternal health literacy and antenatal breastfeeding intention translate into actual exclusive breastfeeding practices after childbirth.

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