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Original Article

Associated Factors of Early Breastfeeding Initiation and Exclusive Breastfeeding in South Africa: Evidence From the South African Demographic and Health Survey

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Abstract

Background and aims: Breastfeeding is the most desirable nutritional source for 0–6 month-old infants. The initiation of early and exclusive breastfeeding is essential as a robust primary health prevention strategy for many children. This study aimed to examine the prediction of factors associated with early breastfeeding initiation and exclusive breastfeeding in South Africa.

Methods: The required data were extracted from the South African Demographic and Health Survey 2016. A total of 3548 respondents were included in the analysis. A multivariable logistic model was applied in the analysis to examine factors associated with breastfeeding practices.

Results: About 63.3% of the respondents imitated breastfeeding within 1 hour of birth, and 31.2% were exclusively breastfed during the first 6 months. The results demonstrated that maternal age (Odds ratio [OR] = 2.49, 95% CI = 1.61–3.86, $P<0$ .001), antenatal care (OR = 0.80, 95% CI = 0.67–0.95, $P=0.009$), postnatal care (AOR = 0.82, 95% CI = 0.68–0.99, $P=0.036$), and a child's health check before leaving the hospital (AOR = 0.69, 95% CI = 0.56–0.86, $P<0.001$) were significantly associated with low initiation of breastfeeding. Maternal age (AOR = 0.44, 0.28–0.69, $P=0.001$), birth order (AOR = 1.71, 95% CI = 1.37–2.14, $P=0.001$), and child's health check (AOR = 0.63, 0.41–0.96, $P=0.033$) were significantly associated with non-exclusive breastfeeding.

Conclusion: A low proportion of women practice delayed breastfeeding initiation. Hence, the findings revealed that exclusive health education and counselling should be provided for mothers before, during, and after pregnancy for greater changes in the direction of the relationship between mothers' breastfeeding initiation and performance.

Keywords: Baby nutrition, Breastfeeding initiation, Breastfeeding practices, Exclusive breastfeeding, Non-exclusive breastfeeding

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Introduction

Proper feeding in early infancy and childhood is vital for optimal growth, development, and the mother-child emotional bond through the first six months of breastfeeding.[1] Lack of exclusive breastfeeding can result in malnutrition, affecting individual health and hindering economic and human capital development, particularly in developing countries.[2] The breastfeeding performance index (BPI) includes essential elements for optimal breastfeeding, as recommended by the World Health Organization (WHO), emphasizing the initiation of exclusive breastfeeding within an hour of birth for the initial six months, followed by introducing nutritionally adequate complementary foods while sustaining breastfeeding for up to two years, with supplemental feeding beginning around six months.[3]

Adhering to all three WHO recommendations is crucial to minimizing infant mortality. Breastfeeding provides essential protection for a child's immune system, offering healthy, safe, and hygienic nourishment with antibodies that guard against various illnesses.[4] It supplies energy and vital nutrients in the early months, continuing to provide nutritional benefits into the second year.[5] Good breastfeeding significantly reduces childhood mortality, contributes to intelligence, lowers the risk of being overweight, and decreases the likelihood of developing diabetes in children.[6,7]

Almost all mothers can breastfeed, except for rare medical challenges [8] and lack of exclusively breastfeeding increases the risk of infection-related mortality; in low- and middle-income countries, only 37% of infants under six months experience to exclusive breastfeeding, highlighting the stable rate over the past two decades, affecting two out of every three newborns.[9]

In developing economies such as South Africa (SA), India, and Indonesia, breastfeeding is common, but exclusive breastfeeding is rare.[10] Mothers often introduce complementary liquids within the first seven days, influenced by cultural and socioeconomic factors, limited infant feeding knowledge, and inconsistent advice.[11]

South African mothers, according to Meyer et al[12] and Black et al,[13] introduce liquids and food early while breastfeeding. Unlike other African countries, South African breastfeeding practice is uncommon, and formula milk is widely used. Mushaphi et al[14] found that in the Vhembe district, Limpopo province, South Africa, 91.3% of infants received a mix of breastmilk and solid food, and 95.5% had a combination of breastmilk and water.

Globally, only 40% of babies are exclusively breastfed.[15] In Nigeria, studies indicate that factors beyond breastfeeding knowledge and attitude contribute to low rates of full breastfeeding.[16] Family and community influences, with grandmothers often suggesting the early introduction of complementary foods, further affect infant feeding practices.[17,18] Despite maternal knowledge, autonomous decision-making is crucial for optimal practices.[19] The study aims to investigate factors influencing breastfeeding initiation and performance, particularly in low- and middle-income countries such as South Africa, using 2016 SA Demographic and Health Survey data to enhance an understanding of the complex dynamics impacting child health and development.

Materials and Methods

Study Design, Sampling Technique, and Study Population

The data utilized in this study were obtained from the South African Demographic and Health Survey (SADHS) 2016 (http://www.DHSprogram.com), and the Statistics South Africa Master Sample Frame was used for data collection. The SADHS framework includes data on South Africa's nine provinces, their geographical characteristics, and estimated residential dwelling units. In the 2016 survey, three questionnaires were used, including one for households, one for women aged 15–49, and one for men. Interviews were conducted face-to-face with eligible women, aged 15–49, who were either permanent residents or had spent at least one night in the household before the survey. The study employed a cross-sectional design, utilizing a two-stage stratified sampling approach with a probability proportional to the sample size.

Variables

The study has two dependent variables, namely, breastfeeding initiation (coded as "1" if a mother initiated breastfeeding within the first hour after birth and "0" otherwise), and exclusive breastfeeding (coded as "1" if the mother exclusively fed the baby with breast milk during the first 6 months following birth and "0" otherwise). Data on breastfeeding practices and factors were extracted from the women's questionnaire. The main independent variables were maternal age, region, place of residence, maternal education, race, wealth index of household, contraceptive use, maternal marital status, and antenatal care. The other variables included postnatal care, place of delivery, birth order, type of birth, gender of the child, size of the child at birth, and the child's health check before leaving the hospital.

Statistical Analysis

The study used descriptive statistics, such as frequencies and percentages, to characterize the study population's independent variables. To explore the influence of socioeconomic and demographic factors on early initiation and exclusive breastfeeding, multivariable logistic regression models were employed using R software, version 4.1.2.

Results

Socio-demographic and Reproductive Health Characteristics of the Respondents

It is evident that the proportion of women aged 15–20 who initiated early breastfeeding and exclusive breastfeeding was 74.9%. and 23.7%, respectively (Table 1). The proportion of early breastfeeding initiation (73.3%) and exclusive breastfeeding (39.3%) was higher in Western Cape province. There was no obvious difference between urban (62.4%) and rural (62.3%) residents in early breastfeeding within 1 hour of the birth group. There was almost uniformity among both urban (31.6%) and rural (30.9%) residents among the exclusive breastfeeding group. The percentage of early breastfeeding initiation was lower among mothers with primary education (60.2%), but exclusive breastfeeding was the lowest among mothers with secondary education (30.9%). More than two-thirds of coloured mothers (72.3%) had early breastfeeding initiation within 1 hour of birth, while exclusive breastfeeding was higher among white mothers (41.5%).

The majority of the children in this study, specifically 51.6%, were males. Female babies had a higher percentage of early breastfeeding initiation (63.1%) and exclusive breastfeeding (31.6%), respectively. Approximately 68.1% of babies were delivered in government hospital facilities (Table 1). Babies delivered in these health facilities had a higher proportion of antenatal care (66.6%) and postnatal care (71.0%) check-ups. Nearly half of the mothers (49.0%) of these babies were from a poor economic level, and most of them (54.3%) were never married.

Factors Associated With Early Breastfeeding Initiation

Multivariable logistic regression models were utilized to evaluate factors linked to early breastfeeding (Table 2). Accordingly, age, birth type, antenatal care, postnatal care, and the child's health check showed a significant association with early breastfeeding initiation. The mothers' age categories were significantly related to early breastfeeding initiation. The odds of having early breastfeeding initiation within 1 hour of birth were two times significantly higher among 41–50- (odds ratio [OR] = 2.22, 95% confidence interval [CI] = 1.51–3.27, $P < 0.001$), 1.89 times higher among 31–40- (OR = 1.89, 95% CI = 1.36–2.61, $P < 0.001$), and 1.81 times higher among 21–30- (OR = 1.81, 95% CI = 1.31-2.49, $P < 0.001$) year-old mothers compared to 15–20-year-old mothers. Coloured mothers were 39% less likely to start early

Table 1. Demographic Characteristics of Infant and Mothers SADHS 2016 (N = 3548)

Variables	Levels	No. (%)	Breastfeeding Initiated in the First Hour		Exclusive Breastfeeding for 6 Months	
			Early (%)	Delayed (%)	Yes (%)	No (%)
Maternal age	15–20	219 (6.2)	74.9	25.1	23.7	76.3
	21–30	1832 (51.6)	62.3	37.7	31.5	68.5
	31–40	1216 (34.3)	61.3	38.7	32.0	68.0
	41–50	281 (7.9)	57.3	42.7	32.0	68.0
Region	Western Cape	206 (5.8)	73.3	26.7	39.3	60.7
	Eastern Cape	450 (12.7)	64.9	35.1	28.4	71.6
	Northern Cape	286 (8.1)	71.0	29.0	32.2	67.8
	Free State	318 (9.0)	61.3	38.7	29.6	70.4
	Kwazulu-Natal	555 (15.6)	57.3	42.7	34.1	65.9
	North-West	395 (11.1)	62.5	37.5	34.2	65.8
	Gauteng	370 (10.4)	60.8	39.2	32.4	67.6
	Mpumalanga	501 (14.1)	55.5	44.5	24.4	75.6
	Limpopo	467 (13.2)	64.7	35.3	31.5	68.5
Residence	Urban	1863 (52.5)	62.4	37.6	31.6	68.4
	Rural	1685 (47.5)	62.3	37.7	30.9	69.1
Maternal education	No education	53 (1.5)	60.4	39.6	37.7	62.3
	Primary	344 (9.7)	60.2	39.8	32.3	67.7
	Secondary	2800 (78.9)	62.4	37.6	30.9	69.1
	Higher	351 (9.9)	64.4	35.6	31.6	68.4
Ethnicity	Black	3173 (89.4)	61.3	38.7	31.3	60.7
	White	53 (1.5)	69.8	30.2	41.5	58.5
	Coloured [a]	300 (8.5)	72.3	27.7	28.7	71.3
	Indian/Asian	22 (0.6)	50 .0	50.0	31.8	68.2
Wealth index	Poor	1740 (49.0)	62.0	38.0	31.8	68.2
	Middle	817 (23.0)	62.8	37.2	30.5	69.5
	Rich	991 (27.9)	62.6	37.4	30.9	69.1
Maternal marital	Never married	1926 (54.3)	61.9	38.1	31.0	69.0
	Married	863 (24.3)	64.3	35.7	32.9	67.1
	Living with partner	602 (17.0)	61.6	38.4	28.4	71.6
	Widowed	38 (1.1)	47.4	52.6	28.9	71.1
	Divorced	27 (0.8)	59.3	40.7	33.3	66.7
	Separated	92 (2.6)	64.1	35.9	39.1	60.9
Birth order	1st	1278 (36.0)	61.7	38.3	32.5	67.5
	2nd	1106 (31.2)	66.2	34.8	34.3	65.7
	3 +	1164 (32.8)	60.2	39.8	27.0	73.0
Birth type	Single	3451 (97.3)	62.6	37.4	31.0	69.0
	Multiple	97 (2.7)	51.5	48.5	39.2	60.8
Child gender	Male	1832 (51.6)	61.6	38.4	30.9	69.1
	Female	1716 (48.4)	63.1	36.9	31.6	68.4
Place of delivery	Home	135 (3.8)	63.7	36.3	31.9	68.1
	Govt. hospital	3148 (88.7)	61.8	38.2	31.4	68.6
	Private hospital	249 (7.0)	67.9	32.1	28.5	71.5
	Others	16 (0.5)	75.0	25.0	25.0	75.0
Child's size	Large	897 (25.3)	62.3	37.7	32.0	68.0
	Average	2065 (58.2)	62.8	37.2	31.7	68.3
	Small	586 (16.5)	60.6	39.4	28.3	71.7
Antenatal care	No	1186 (33.4)	55.5	44.5	31.5	68.5
	Yes	2362 (66.6)	65.7	34.3	31.1	68.9
Postnatal care	No	1028 (29.0)	53.7	46.3	33.0	67.0
	Yes	2520 (71.0)	65.8	34.2	30.5	69.5
Child's health checked	No	773 (21.8)	50.3	49.7	34.4	65.6
	Yes	2775 (78.2)	65.7	34.3	30.3	69.7

[a] "Coloured" is a South African term used to refer to individuals of mixed racial heritage.

Table 2. Associated Factors Between Breastfeeding Initiation and Exclusive Breastfeeding

Variable	Levels	Breastfeeding Initiated in the First Hour	Exclusive Breastfeeding for 6 Months
		OR (95% CI, *P* Value)	OR (95% CI, *P* Value)
Maternal age	15–20	1	1
	21–30	1.81 (1.31–2.49, $P<0.001$)	0.68 (0.49–0.94, $P=0.019$)
	31–40	1.89 (1.36–2.61, $P<0.001$)	0.66 (0.47–0.92, $P=0.015$)
	41–50	2.22 (1.51–3.27, $P<0.001$)	0.66 (0.44–0.99, $P=0.042$)
Type of residence	Urban	1	1
	Rural	1.01 (0.88–1.15, $P=0.943$)	1.03 (0.90–1.19, $P=0.652$)
Maternal education	No education	1	1
	Primary	1.01 (0.56–1.82, $P=0.978$)	1.27 (0.70–2.32, $P=0.431$)
	Secondary	0.92 (0.53–1.60, $P=0.768$)	1.35 (0.77–2.37, $P=0.290$)
	Higher	0.84 (0.47–1.52, $P=0.571$)	1.31 (0.72–2.39, $P=0.377$)
Ethnicity	Black	1	1
	White	0.69 (0.38-1.24, $P=0.211$)	0.64 (0.37-1.11, $P=0.115$)
	Coloured[a]	0.61 (0.47–0.79, $P<0.001$)	1.13 (0.87-1.47, $P=0.347$)
	Indian/Asian	1.59 (0.69–3.67, $P=0.281$)	0.98 (0.40-2.40, $P=0.958$)
Wealth index	Poor	1	1
	Middle	0.96 (0.81–1.15, $P=0.684$)	1.06 (0.89–1.27, $P=0.507$)
	Rich	0.97 (0.83–1.14, $P=0.752$)	1.04 (0.88–1.23, $P=0.625$)
Using contraceptive	No	1	1
	Yes	0.93 (0.81–1.08, $P=0.338$)	0.99 (0.86–1.16, $P=0.947$)
Maternal marital	Never married	1	1
	Married	0.90 (0.76–1.06, $P=0.222$)	0.92 (0.77–1.09, $P=0.316$)
	Living with partner	1.01 (0.84–1.22, $P=0.908$)	1.13 (0.93–1.39, $P=0.228$)
	Widowed	1.80 (0.95–3.43, $P=0.072$)	1.10 (0.54–2.24, $P=0.787$)
	Divorced	1.12 (0.52–2.42, $P=0.780$)	0.90 (0.40–2.01, $P=0.794$)
	Separated	0.91 (0.59–1.40, $P=0.665$)	0.70 (0.45–1.07, $P=0.102$)
Birth order	1st	1	1
	2nd	0.86 (0.73–1.02, $P=0.081$)	0.92 (0.78–1.09, $P=0.354$)
	3 +	1.07 (0.91–1.25, $P=0.444$)	1.30 (1.09–1.55, $P=0.003$)
Birth type	Single	1	1
	Multiple	1.57 (1.05–2.36, $P=0.028$)	0.70 (0. 46–1.06, $P=0.088$)
Child gender	Male	1	1
	Female	0.94 (0.82–1.08, $P=0.0381$)	0.97 (0.84–1.12, $P=0.658$)
Place of delivery	Home	1	1
	Government hospital	1.09 (0.76–1.56, $P=0.648$)	1.02 (0.70–1.47, $P=0.921$)
	Private hospital	0.83 (0.53–1.29, $P=0.409$)	1.17 (0.74–1.85, $P=0.494$)
	Others	0.59 (0.18–1.91, $P=0.375$)	1.40 (0.43–4.60, $P=0.577$)
Size of a child at birth	Large	1	1
	Average	0.98 (0.83–1.15, $P=0.800$)	1.01 (0.86–1.20, $P=0.882$)
	Small	1.08 (0.87–1.33, $P=0.501$)	1.19 (0.95–1.50, $P=0.134$)
Antenatal care	No	1	1
	Yes	0.65 (0.56–0.75, $P<0.001$)	1.02 (0.87–1.18, $P=0.840$)
Postnatal care	No	1	1
	Yes	0.60 (0.52–0.70, $P<0.001$)	1.12 (0.96–1.31, $P=0.151$)
Child's health checked	No	1	1
	Yes	0.53 (0.45–0.62, $P<0.001$)	1.20 (1.02–1.43, $P=0.031$)

Note. OR: Odds ratio; CI: Confidence interval.

[a] "Coloured" is a South African term used to refer to individuals of mixed racial heritage.

breastfeeding (OR = 0.61, 95% CI = 0.47–0.79, $P < 0.001$), and mothers with multiple births were 1.57 times more likely to start breastfeeding early within 1 hour of birth (OR = 1.57, 95% CI = 1.05–2.36, $P = 0.028$) in comparison to single birth type mothers.

The odds of early breastfeeding initiation within one hour among the mothers with antenatal care were significantly lower (OR = 0.65, 95% CI = 0.56–0.75, $P < 0.001$) compared to mothers without antenatal care. Mothers who had postnatal care were 40% more likely to start breastfeeding early in comparison to mothers without postnatal care (OR = 0.60, 95% CI = 0.52–0.70, $P < 0.001$). The odds of the child's health check were significantly lower (OR = 0.53, 95% CI = 0.45–0.62, $P < 0.001$) compared to those without health checks.

Associated Factors of Exclusive Breastfeeding

In the multivariable logistic regression models, variables such as age, birth order, and child's health check were significantly associated with exclusive breastfeeding within 6 months of birth. The mothers' age categories were statistically significantly associated with exclusive breastfeeding. Mothers who were in the age range of 21–30 (OR = 0.68, 95% CI = 0.49–0.94, $P = 0.019$), 31–40 (OR = 0.66, 95% CI = 0.47–0.92, $P = 0.015$), and 41–50 (OR = 0.66, 95% CI = 0.44–0.99, $P = 0.042$) years old were less likely to exclusively breastfeed compared to 15–20-year-old mothers. Mothers with 3 or more birth orders were 1.30 times more likely to have exclusive breastfeeding within 6 months of birth (OR = 1.31, 95% CI = 1.09–1.55, $P = 0.003$) in comparison to mothers with first birth orders. The odds of the child's health check were 1.20 times more likely to have exclusive breastfeeding within 6 months of birth (OR = 1.20, 95% CI = 1.02-1.43, $P = 0.031$) when compared to those without a health check.

Significant Impact on Breastfeeding Initiation and Exclusive Breastfeeding

A model performance illustration was examined to gain insight into the key factors influencing significant impacts on breastfeeding initiation and exclusive breastfeeding. Each row in these plots represents a distribution of model scores for various sets of categories, and each step removes a single variable from this set. The variable labels on the left side of the plots indicate which variables are removed in each step. The beginning and end of each rectangle correspond to an estimate of the association. For the early breastfeeding initiation model, more than 83% were defined as factors driving the relationship in a single observation. Figure 1 displays that the model estimate for early breastfeeding initiation has a good contributing factor in the estimate.

More than 70% contributed as factors driving the relationship for a single observation of the BPI (Figure 2). The estimate for the low BPI is a good contributing factor to the model.

Discussion

Breastfeeding is the best and most desirable child's nutritional source and immune defence and serves as robust primary health prevention for many infants and women.[20] It holds the most significant potential to impact child health and reduce mortality.[21] This study examined the associated factors influencing early breastfeeding initiation rates and the BPI among women in South Africa. In this study, a low early breastfeeding initiation rate of 37.7% and a low BPI of 31.2% were observed among women in South Africa, which is sub-optimal. However, the low rates of early breastfeeding initiation in the present study conform to the low rates of breastfeeding initiation within one hour of birth among women with six-month-old infants attending public health institutions in Addis Ababa, Ethiopia.[22]

In this study, variables such as maternal age, ethnicity, skin colour, marital status, second birth order, antenatal care, postnatal care, and the child's health check were found to be significantly associated factors of early breastfeeding initiation in South Africa. The findings indicated that older women are significantly associated with early breastfeeding initiation, which is in line with the results of one study[23] but dissimilar to those of a study from China.[24] This is because the United States has achieved the Healthy People 2010 initiative goal of a 75% breastfeeding initiation rate, and Norway has a robust breastfeeding tradition and supportive maternal leave system among older women.

The importance of breastfeeding throughout the first year of a child's life for the risk reduction of infant mortality emphasizes the need to establish early breastfeeding initiation, particularly among the black and coloured population, where disparities persist and hurt health outcomes. The findings revealed that early breastfeeding initiation rates among the coloured women's ethnic group were significantly lower. This coloured racial and ethnic minority group was observed to have a decreased early breastfeeding initiation rate, which is probably due to disparity or less privilege for health professionals compared to other ethnic groups. This result does not concur with those of other studies where white women were perceived to be more privileged to early breastfeeding initiation and have higher breastfeeding rates.[25–27]

Moreover, the study's results suggest that married women are less likely to have early breastfeeding initiation compared to women who never married or women living with a partner. The reason may be a decision by the married woman to start and continue breastfeeding with/without her partner's opinion, as well as the perceived breastfeeding culture of her support system. This finding contradicts the results of a study conducted in the USA, where single women were less likely to initiate breastfeeding.[28] In this study, the birth type was identified as an associated factor contributing to early breastfeeding initiation, but it did not show a significant association with exclusive breastfeeding. In the analysis, mothers

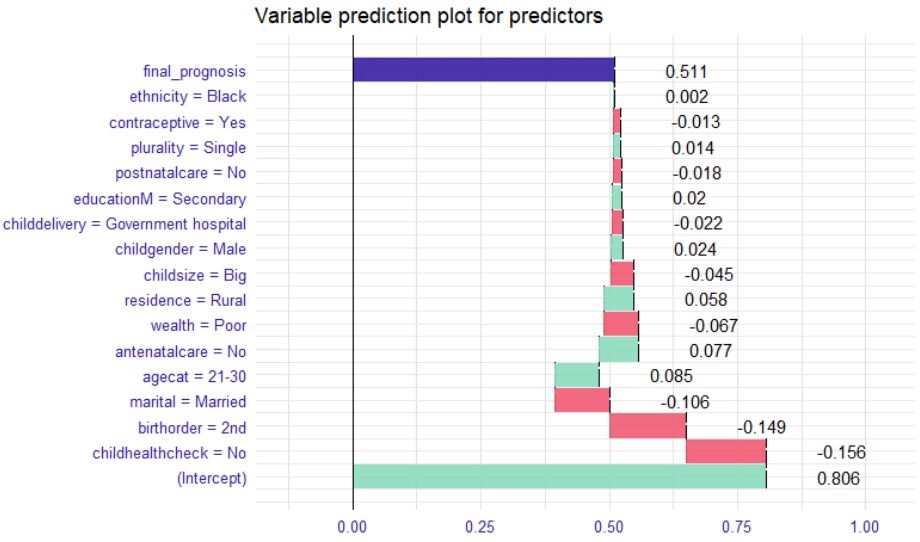

Figure 1. Variable Predicted Probability plot for Breastfeeding Initiation Predictors

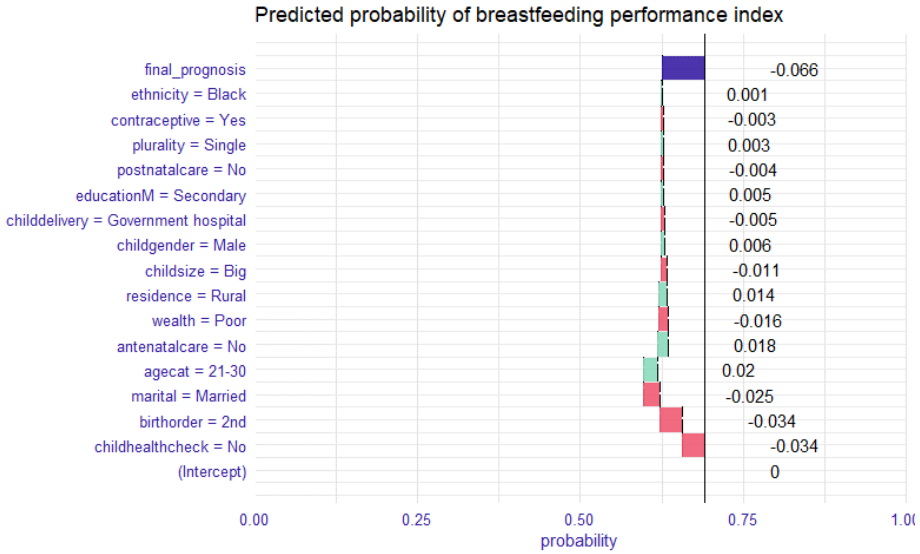

Figure 2. Variable Predicted Probability plot for Breastfeeding Performance Index Predictors

with multiple births were 57% more likely to initiate breastfeeding early within one hour of birth in comparison to single-birth mothers. This statistically significant finding indicates that the presence of multiple births is associated with a higher probability of early breastfeeding initiation within the crucial first hour after delivery. This result contributes valuable insights into factors influencing breastfeeding practices and underscores the importance of considering birth type in promoting timely. This finding is strikingly different from the results of prior studies conducted in Indonesia, Ethiopia, and Namibia, which revealed a correlation between higher birth order and an increased risk of delayed breastfeeding initiation.[29–31] A study performed in West Africa similarly discovered that firstborn children had a 22% lower chance of receiving early breastfeeding initiation compared to children with a birth order of 2 or 3 and a birth interval exceeding 2 years.[32]

Antenatal care, in general, significantly contributes to the early initiation of breastfeeding. This finding indicated that women who received antenatal care were more likely to have early breastfeeding initiation in comparison to mothers who received no antenatal care. The result is consistent with those of other studies where higher early initiation of breastfeeding and reduced risks of delaying breastfeeding initiation were found among mothers who had antenatal care compared to mothers who had no antenatal care.[33–35] One possible explanation is that pregnant women who received antenatal care may have been informed by healthcare providers about the importance of early breastfeeding. However, in this study, prenatal care had a significant influence on early breastfeeding initiation. The result is consistent with that of another study,[36] in which women who received prenatal care were more likely to have breastfeeding initiation levels that were closer to the WHO recommendations than

women who received no prenatal care. Some studies[37,38] reported that prenatal care increases early breastfeeding initiation and is associated with women breastfeeding exclusively for a longer period of time. Their findings imply that early prenatal care may encourage early breastfeeding initiation and duration.

The study also examined the associated factors influencing the BPI among women in South Africa. The findings confirmed that older women are significantly associated with low BPI compared to women aged 15–20 years old. This may be because of a highly supportive network and the great attention given to young women after birth, and people may tend to give less help to an experienced old woman. However, the findings of this study contradict those of other studies,[39,40] in which maternal age was significantly associated with a longer duration of breastfeeding. Mothers over the age of 34 were approximately five times more likely to have a low BPI as compared to mothers younger than 20 years old.[41] This suggests that eldest mothers were more likely than youngest mothers to engage in infant feeding malpractices.[42] This can be justified by the fact that older female family members teach first-time mothers about childcare.[43] This lends credence to the finding that older females are more likely to have a low BPI.

In this study, women with three or more birth orders were two times more likely to have a low BPI compared to women with only one birth order, and women with multiple births were significantly associated with a low BPI. First-time mothers may experience a high BPI because they are given high attention and receive training to gain experience with child breastfeeding, while mothers who had multiple children may have experienced changes in their breastfeeding knowledge, awareness, beliefs, and behaviours.[44,45] The finding of a low BPI for thirdborn and above children might be due to emotional distress, a lack of support from the family or healthcare providers, and the perceived culture of an experienced mother. These are common misconceptions they may experience, which can be explained by variations in socio-economic, cultural, and healthcare service availability and accessibility across provinces.

Strengths and Limitations

One of the limitations of this study is that the direction of the relationship between the identified factors and early breastfeeding initiation and breastfeeding performance appeared to be inconsistent with commonly held scientific perspectives. Some results contradict conventional wisdom, implying that the influence of these factors on breastfeeding practices may be more complex than previously assumed. Therefore, the usual focus of intervention, which often centres on socioeconomic and demographic factors, may need to be re-evaluated. There is a growing need to strengthen the evidence and reorient policy interventions to emphasize the benefits of early breastfeeding initiation for both mothers and infants. This is particularly crucial given the nutritional and protective value of colostrum in the first breast milk and its potential role in bonding between the mother and newborn, which could enhance regular breast milk production. Further research is required to better understand these complex relationships. In addition, this study relies on maternal recall, which is prone to recall bias among the respondents.

Conclusion

The study analysis identified and evaluated the early breastfeeding initiation and BPI of women with infants between 0 and 1 year of age. The study results showed that low percentages of women did not practice optimal breastfeeding initiation and breastfeeding performance. Early breastfeeding initiation was influenced by maternal age, ethnicity, skin colour, marital status, second birth order, antenatal care, postnatal care, and the child's health check. The analysis, however, revealed a shift in the relationship between factors, with some results contradicting commonly accepted scientific insights. These findings suggest that factors influencing breastfeeding may unexpectedly influence the direction of the relationship with mothers' breastfeeding initiation and performance. Consequently, there is a need to re-evaluate the typical focus of interventions, moving away from the common perception that socioeconomic and demographic factors solely drive better breastfeeding practices.

Accordingly, it is essential to strengthen the evidence base and reorient policy interventions to emphasize the benefits of early breastfeeding within the first hour of birth for both the mother and the child. This is crucial given that the first breast milk, colostrum, is highly nutritious and contains antibodies that protect newborns. Furthermore, further research is required to understand how early breastfeeding initiation promotes bonding between the mother and her newborn, facilitating the production of regular breast milk.

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Competing Interests

The author declares that there is no conflict of interests.

Ethical Approval

This study did not require ethical application because it used data from the DHS data archive at http://www.DHSprogram.com with the appropriate request and permission.

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