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The Impact of Traditional Practices and Customs on Pregnant Women and Newborn Mothers' Healthcare-Seeking Behaviors at Primary, Secondary, and Tertiary Health Levels

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ABSTRACT

Introduction: This study investigates the influence of traditional practices and customs on healthcare-seeking behaviors among pregnant women and newborn mothers across different healthcare levels in Bo District, Sierra Leone. Understanding the impact of these customs is crucial for developing culturally sensitive maternal and neonatal health strategies.

Materials and Methods: A mixed-methods approach was applied, involving 500 participants (pregnant women and newborn mothers) from urban and rural settings. Data was collected using the Ona mobile application through structured surveys. Quantitative analysis included descriptive statistics, Chi-Square tests, ANOVA, and multinomial logistic regression to evaluate primary, secondary, and tertiary healthcare utilization. The qualitative analysis explored the cultural context of healthcare decisions.

Results: Traditional practices were acknowledged by 52.40% of respondents, and 40.40% actively participated in customs such as herbal remedies, ceremonies, and traditional birthing practices. These practices significantly influenced the preference for primary (OR = 2.45, $p < 0.01$) and secondary (OR = 1.78, $p < 0.05$) healthcare facilities. Regression analysis indicated that integrating traditional practices into healthcare policies positively impacted healthcare-seeking behavior ($\beta = 0.42$, $p < 0.01$).

Conclusions: Traditional beliefs play a significant role in healthcare-seeking behavior, particularly at primary and secondary health levels. Integrating these practices into modern healthcare policies is essential for improving maternal and newborn health outcomes and fostering a more culturally sensitive healthcare system.

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INTRODUCTION

Healthcare-seeking behaviour among pregnant women and newborn mothers is shaped by a variety of factors, including cultural beliefs, traditional practices, and access to modern healthcare. In Sub-Saharan Africa, where traditional customs are deeply ingrained, these practices often play a significant role in determining when and where women seek healthcare [1]. Sierra Leone, particularly the Bo District, presents a case where these customs continue to influence maternal healthcare choices, despite ongoing efforts to promote modern medical practices.

Traditional practices and customs have long

dictated maternal healthcare behaviours in Sierra Leone. Many pregnant women and newborn mothers rely on traditional birth attendants (TBAs) due to their accessibility, affordability, and alignment with cultural values [2]. These traditional healers provide care based on long-standing customs trusted within the community, making them a preferred option for many women, especially in rural areas.

Herbal remedies, dietary restrictions, and traditional ceremonies related to pregnancy and childbirth are commonly practiced across Sierra Leone, including in Bo District [3]. These customs, while culturally important, often lead to delays in seeking formal healthcare services. Such delays can result in adverse maternal and neonatal outcomes, particularly when complications arise that require medical interventions beyond the capabilities of TBAs.

Cultural norms, such as the need for women to seek permission from husbands or elder family members before accessing healthcare, also contribute to healthcare delays [4]. Additionally, the fear of stigmatization related to pregnancy and childbirth, combined with a mistrust of modern medicine, can further limit healthcare utilization. These factors underscore the complexity of integrating traditional and modern healthcare practices to improve maternal and newborn health.

This study therefore

1. Identified and analyzed the traditional practices and customs influencing healthcare -seeking behaviours among pregnant women and newborn mothers in Sierra Leone.
2. Evaluated the differences in healthcare-seeking behaviours at primary, secondary, and tertiary healthcare levels due to traditional practices.

METHODS

Study Design

The research applied the mixed-methods approach, combining quantitative and qualitative data to gather comprehensive data on the impact of traditional practices and customs on healthcare-seeking behaviours among pregnant women and newborn mothers.

Participants' Selection and Exclusion Criteria

The criteria included:
Participants must reside in Bo District, Sierra Leone, be either pregnant women or newborn mothers, and must attend either the Bo Government Hospital (urban) or the Tikonko Village Health Centre (rural).

The study excluded women who had not lived in Bo District for at least six months or who were neither pregnant nor mothers of children under five. Also excluded were those who had not used services at the Bo Government Hospital or Tikonko Village Health Centre, and those unable to give informed consent due to communication or cognitive challenges. Participation was entirely voluntary, so anyone who chose not to take part or later withdrew was respectfully excluded.

Sample Size Determination

The following Cochran's formula was used in determining the sample size:

$$n_0 = \frac{Z^2 \cdot p \cdot (1 - p)}{e^2}$$

Where:

- $\mathbf{n_0}$ = initial sample size (before adjustments)
- **Z** = Z-value (standard normal deviate corresponding to the desired confidence level of 1.96 at 95% confidence)
- **p** = estimated proportion of the attribute

present in the population (set to 0.5 for maximum variability)
e = margin of error (0.05)

The study initially determined a sample size of 370 participants using Cochran's formula (state the formula and variables). To enhance the research's robustness, this number was increased by 26%, adding 130 participants, resulting in a final sample size of 500 - 294 pregnant women and 206 mothers of newborns. The adjustment accounted for potential non-responses, improved population representativeness, and reduced sampling errors, ensured adequate statistical power, and captured a broader spectrum of population variability, thereby enhancing the wider application of the study findings. The study employed a simple random sampling approach.

Data Collection
The study collected data from pregnant women and new mothers at primary, secondary, and tertiary health facilities in Bo District. Questionnaires were administered to the study participants via Ona, a mobile application. The study obtained ethical approval, ensured participants' confidentiality and anonymity, and encouraged honest responses. Ten data enumerators were trained before deployment in the field to collect data.

Piloting and Refining the Questionnaire
A pilot study was done with a small subset of participants to test the questionnaire's clarity, relevance, and reliability. Necessary adjustments were made. Based on the participants' feedback, the study ensured that the final questionnaire effectively captured the required data.

Monitoring and Adjusting
The participant selection process was monitored to ensure that the sample remained representative of the target population throughout the data collection process. Recruitment strategies were adjusted to ascertain the inclusion of socio-demographic groups that were underrepresented.

Statistical Analysis
A combination of qualitative and quantitative advanced statistical methods was used to analyze the research data. Advanced statistical methods were applied in the study.

RESULTS

Participants' Demographic Factors
The study involved 500 participants, with 74.80% attending Bo Government Hospital, an urban healthcare facility, and 25.20% attending Tikonko Maternity Home in a rural setting (**Table 1**). **Table 2** depicts that the mean age of pregnant women was 25 years (SD = 4.74), while that of newborn mothers was slightly lower at 24 years (**Table 3**), with both distributions skewed towards younger women. In **Table 4**, most newborns were aged between 29 days and 2 months (33.98%), followed by 28.64% aged 3 to 5 months.

Table 1: Participant Residency

Residency	*Health Facility*	*Frequency*	*Percent*
Urban	Bo Government Hospital	374	74.80
Rural	Tikonko Maternity Home	126	25.20
	Total	**500**	**100**

Table 2: Age (for pregnant women)

Category	*Findings*
Mean	24.826531
Standard Error	0.2765924
Median	25
Mode	25
Standard Deviation	4.7425721
Sample Variance	22.49199
Kurtosis	1.2373596
Skewness	0.829276
Range	29
Minimum	16
Maximum	45
Sum	7299
Count	294
Largest (1)	45
Smallest (1)	16
Confidence Level (95.0%)	0.5443597

Table 3: Age (for newborn women)

Category	*Findings*
Mean	24.067961
Standard Error	0.3021373
Median	23
Mode	20
Standard Deviation	4.3364865
Sample Variance	18.805115
Kurtosis	2.512482
Skewness	1.1848917
Range	28
Minimum	17
Maximum	45
Sum	4958
Count	206
Largest (1)	45
Smallest (1)	17
Confidence Level (95.0%)	0.595695

Table 4: Age (for newborn baby/child)

Age Category	*Frequency*	*Percent*
12 to 23 months old	19	9.22
Less than 24 hours old	1	0.49
1 to 28 days old	34	16.50
29 days to 2 months old	70	33.98
3 to 5 months old	59	28.64
6 to 11 months old	23	11.17
Total	**206**	**100**

The sex distribution of newborns was nearly equal, with 50.97% female and 49.03% male (**Table 5**). Regarding education, most participants had secondary education (53.60%), followed by primary education (28.40%), with smaller proportions having tertiary education (8.00%) or no formal education (10.00%) (**Table 6**). **Table 7** provides marital status, showing 46.60% of participants were married, while 31.60% were single. **Table 8** shows the population being split religiously between Islam (52.40%) and Christianity (47.40%).

Table 5: Sex for Newborn

Sex	*Frequency*	*Percent*
Female	105	50.97
Male	101	49.03
Total	**206**	**100**

Table 6: Participants' Education Level

Education Level	*Frequency*	*Percent*
Secondary education	268	53.60
Primary education	142	28.40
Tertiary education (college/university)	40	8.00
No formal education	50	10.00
Total	**500**	**100**

Table 7: Participants' Marital Status

Marital Status	*Frequency*	*Percent*
Married	233	46.60
Cohabitation	82	16.40
Single	158	31.60
Separated	19	3.80
Widowed	5	1.00
Divorced	3	0.60
Total	**500**	**100**

Table 8: Participants' Religions

Religion	*Frequency*	*Percent*
Islam	262	52.40
Christianity	237	47.40
Indigenous or Traditional Religions	1	0.20
Total	**500**	**100**

Professionally, participants were primarily students (34.80%) or housewives (22.60%), with 30.80% engaged in business (**Table 9**). The Mende tribe comprised 63.00% of participants, followed by 18.00% Temne (**Table 10**). Most families were monogamous (86.80%) (**Table 11**), with an average household size of 5.30 (**Table 12**). In **Table 13**, the mean monthly income was 335.03 New Leone (NLE), with significant income disparities indicated by high skewness (7.95). Finally, the mean number of pregnancies per woman was 1.83, with most women having experienced one or two pregnancies (**Table 14**).

Table 9: Participant Professions/Occupations

Participant Profession/Occupation	*Frequency*	*Percent*
Housewife	113	22.60
Student	174	34.80
Midwife	3	0.60
Business	154	30.80
Other Please specify	31	6.20
Educationist	2	0.40
Social Workers	3	0.60
Military	2	0.40
Agriculturist	13	2.60
Accountant	2	0.40
Paramilitary	1	0.20
Nurse	2	0.40
Total	**500**	**100**

Table 10: Participants' Tribes

Tribe	*Frequency*	*Percent*
Mende	315	63.00
Temne	90	18.00
Limba	40	8.00
Fula (or Fulani)	20	4.00
Sherbro	4	0.80
Kono	7	1.40
Mandingo	11	2.20
Kuranko	4	0.80
Others, please specify	1	0.20
Kru	1	0.20
Krio	2	0.40
Loko	3	0.60
Susu	1	0.20
Kissi	1	0.20
Total	**500**	**100**

Table 11: Participants' Family Type

Family Type	*Frequency*	*Percent*
Polygamous	66	13.2
Monogamous	434	86.8
Total	**500**	**100**

Table 12: Number of individuals living within the household

Parameters	*Findings*
Mean	5.304
Standard Error	0.182037
Median	4
Mode	4
Standard Deviation	4.070469
Sample Variance	16.56872
Kurtosis	41.85113
Skewness	5.041106
Range	50
Minimum	2
Maximum	52
Sum	2652
Count	500
Largest (1)	52
Smallest (1)	2
Confidence Level (95.0%)	0.357653

Table 13: Participant's monthly income in [New Leone (NLE)]

Category	*Findings*
Mean	335.034
Standard Error	29.89562
Median	150
Mode	100
Standard Deviation	668.4864
Sample Variance	446874
Kurtosis	95.5613
Skewness	7.946809
Range	10000
Minimum	0
Maximum	10000
Sum	167517
Count	500
Largest (1)	10000
Smallest (1)	0
Confidence Level (95.0%)	58.7368

Table 14: Number of pregnant experienced by the woman (primiparous and multiparous)

Parameter	*Findings*
Mean	1.834
Standard Error	0.046747
Median	2
Mode	1
Standard Deviation	1.045289
Sample Variance	1.092629
Kurtosis	4.581028
Skewness	1.83711
Range	6
Minimum	1
Maximum	7 and above
Sum	917
Count	500
Largest (1)	7 and above
Smallest (1)	1
Confidence Level (95.0%)	0.091845

Health-Seeking Behaviour During Pregnancy and After Childbirth

Table 15 shows that participants (100%) received antenatal care (ANC) services during pregnancy.

Many participants (71%) received ANC services from public health facilities, followed by community health centrees (24%), and a smaller percentage (4.6%) from private health facilities (**Table 16**).

A significant proportion of participants (44.4%) attended 3-4 ANC visits, while 41.2% attended 5 or more visits (**Table 17**).

The vast majority (99.03%) of participants gave birth in a healthcare facility, with only 0.97% delivering at home (**Table 18**).

Table 15: Antenatal Care (ANC) Services Received During Pregnancy

Response Ca tegory	*Frequency*	*Percent*
Yes	500	100
No	0	0.00
Total	**500**	**100**

Table 16: Site where ANC Services were primarily Received

Response Category	*Frequency*	*Percent*
Public health facility	355	71.00
Community health center	120	24.00
Private health facility	23	4.60
Other, Please Specify	2	0.40
Total	**500**	**100**

Table 17: Number of ANC visits received during most recent Pregnancy

Response Category	*Frequency*	*Percent*
5 or more visits	206	41.20
3-4 visits	222	44.40
1-2 visits	71	14.20
Not sure	1	0.20
Total	**500**	**100**

Table 18: Place of Childbirth

Response Category	*Frequency*	*Percent*
Home	2	0.97
Healthcare Facility	204	99.03
Total	**206**	**100**

Traditional Beliefs and Customs

In **Table 19**, 52.40% of respondents reported that their communities hold traditional beliefs related to pregnancy and childbirth. **Table 20** shows that 40.40% had personally participated in traditional practices, indicating strong cultural adherence. According to **Table 21**, the most common practices were attending traditional ceremonies (17.91%) and using herbal remedies (17.68%), followed by specific dietary restrictions (13.96%) and traditional birthing methods (12.95%).

As shown in **Table 22**, 37.60% of respondents believed traditional beliefs influenced their healthcare-seeking behaviour, while 62.40% disagreed. In **Table 23**, 20.71% preferred traditional healers or midwives, 16.89% were influenced by traditional beliefs when choosing healthcare services, and 15.44% followed specific lifestyle or dietary customs.

However, **Table 24** reveals that 32.41% preferred evidence-based medical practices. Other reasons for rejecting traditional influences included unfamiliarity with traditional practices (18.63%) and a stronger trust in professional healthcare advice (14%). These findings suggest mixed but notable cultural influence on maternal care decisions.

Table 19: Present of traditional beliefs or customs in your community related to pregnancy, childbirth, or maternal health

Response Category	*Frequency*	*Percent*
Yes	238	52.40
No	262	47.60
Total	**500**	**100**

Table 20: Personal observation or participation in any traditional practices related to pregnancy and childbirth

Response Category	*Frequency*	*Percent*
Yes	202	40.40
No	298	59.60
Total	**500**	**100**

Table 21: Traditional practices related to pregnancy and childbirth observed or participated in

Response Category	*Multiple Response Frequency*	*Percent*
Participating in a traditional ceremony or ritual to bless the pregnancy or unborn child.	159	17.91
Using herbal remedies or traditional medicines recommended by elders or traditional healers during pregnancy or for childbirth.	157	17.68
Following specific dietary practices or restrictions based on cultural beliefs during pregnancy.	124	13.96
Engaging in traditional birthing practices, such as home births with the assistance of a midwife or doula.	115	12.95
Observing postpartum confinement or rest periods as dictated by cultural traditions.	75	8.45
Participating in naming ceremonies or other rituals for the newborn that are specific to my culture.	65	7.32
Adhering to traditional beliefs or superstitions regarding pregnancy and childbirth activities or behaviors.	43	4.84
Using traditional clothing or items during pregnancy or childbirth as dictated by cultural customs.	37	4.17
Following specific practices related to the announcement of pregnancy or the introduction of the newborn to the community.	31	3.49
Following specific traditions for naming or welcoming the newborn.	26	2.93
Engaging in specific physical activities or exercises that are traditional in my culture during pregnancy.	26	2.93
Practicing traditional methods of pain management during childbirth.	18	2.03
Observing cultural taboos or superstitions related to pregnancy and childbirth.	12	1.34
Total	**888**	**100**

Table 22: Believe that traditional beliefs and customs play a role in shaping your healthcare-seeking behavior during pregnancy and postnatal care

Response Category	*Frequency*	*Percent*
Yes	188	37.60
No	312	62.40
Total	**500**	**100**

Table 23: How traditional beliefs and customs shape your healthcare-seeking behavior during pregnancy and postnatal care

Response Category	*Multiple Response Frequency*	*Percent*
prefer consulting traditional healers or midwives for prenatal advice due to cultural beliefs.	157	20.71
Traditional beliefs influence my decision on the type of healthcare services I choose during pregnancy.	128	16.89
I follow specific dietary or lifestyle practices during pregnancy as advised by traditional customs.	117	15.44
Cultural customs dictate the timing or frequency of my healthcare visits.	108	14.25
Traditional customs and beliefs impact my willingness to seek certain medical interventions or treatments.	68	8.97
I seek healthcare providers who respect or incorporate traditional beliefs into their practice.	62	8.18
Cultural beliefs lead me to prioritize home remedies or natural approaches over conventional medical treatments.	45	5.94
Traditional beliefs affect my openness to discuss pregnancy-related issues with healthcare providers.	32	4.22
I engage in specific rituals or ceremonies believed to protect or benefit my pregnancy and seek healthcare that accommodates these practices.	24	3.17
My community's traditional beliefs influence my perception of the necessity and importance of prenatal care.	17	2.23
Total	**758**	**100**

Table 24: Why traditional beliefs and customs do not influence healthcare-seeking behavior during pregnancy and postnatal care

Response Category	*Multiple Response Frequency*	*Percentage*
I prioritize evidence-based medical practices over traditional beliefs for healthcare.	280	32.41
I am not familiar with or do not strongly identify with traditional practices in my community.	161	18.63
I believe in making healthcare decisions based on personal research and professional medical advice.	121	14
I have had negative experiences or outcomes with traditional practices in the past.	82	9.49
I find traditional beliefs and customs to be outdated or not applicable to modern healthcare.	78	9.03
My community or family does not strongly adhere to traditional practices.	57	6.6
I am influenced more by global or multicultural perspectives on healthcare.	46	5.32
I have concerns about the safety or efficacy of traditional practices during pregnancy.	27	3.13
There is a lack of traditional practices or customs related to pregnancy in my culture or community.	12	1.39
Total	**864**	**100**

Influence of Traditional Beliefs and Customs

The study reveals that 72% of respondents indicated no influence of traditional beliefs on their ANC or PNC decisions, while 16% reported negative and 12% positive influences (**Table 25**). Regarding the choice of healthcare providers, 41.4% acknowledged the role of traditional beliefs, whereas 58.6% were unaffected (**Table 26**). Among those influenced, 55.07% reported moderate influence, 26.57% a very strong influence, and 6.28% no influence (**Table 27**).

Table 25: How have traditional beliefs or customs influenced decisions regarding antenatal care (ANC) during recent pregnancy or recent postnatal care

Response Category	*Frequency*	*Percent*
They influenced me negatively	80	16.00
They had no influence	360	72.00
They influenced me positively	60	12.00
Total	**500**	**100**

Table 26: Have traditional beliefs or customs affected your choice of healthcare providers during pregnancy or after childbirth?

Response Category	*Frequency*	*Percent*
Yes	207	41.40
No	293	58.60
Total	**500**	**100**

Table 27: How traditional beliefs or customs influenced choice of healthcare providers

Response Category	*Frequency*	*Percent*
Slightly Influential	23	11.11
Very Influential	55	26.57
Extremely Influential	2	0.97
Moderately Influential	114	55.07
Not Influential at All	13	6.28
Total	**207**	**100**

Seeking Healthcare Against Traditional Beliefs

The study highlights a shift towards modern healthcare practices, with 65% of respondents seeking services during pregnancy or childbirth that went against traditional beliefs (**Table 28**), such as hospital births (27.72%), epidural use (15.75%), and cesarean sections (12.98%) (**Table 29**). However, 35% still adhered to traditional practices, reflecting resistance or limited access to modern care (**Table 28**). Key factors influencing this shift included access to evidence-based information (19.39%) and recommendations from medical professionals (18.19%), emphasizing the role of informed decision-making in adopting modern healthcare (**Table 30**).

Table 28: Seeking healthcare services during pregnancy or after childbirth against traditional beliefs or customs

Response Category	*Frequ ency*	*Percent*
Yes	325	65.00
No	175	35.00
Total	**500**	**100**

Table 29: Description of situations where seeking healthcare services during pregnancy or after childbirth went against traditional beliefs or customs

Response Category	*Multiple Response Frequency*	*Percentage*
I opted for a hospital birth over a traditional home birth due to medical advice or personal preference.	301	27.72
I chose to receive epidural anesthesia or other pain relief methods contrary to traditional practices of natural childbirth.	171	15.75
I pursued medical interventions like inductions or cesarean sections, despite cultural preferences for natural processes.	141	12.98
I decided to follow a diet or exercise plan recommended by healthcare professionals instead of traditional advice.	126	11.6
I engaged in prenatal screening and diagnostic tests that are not typically accepted in my cultural or traditional beliefs.	120	11.05
I sought mental health services or counseling for pregnancy-related issues, which is not commonly accepted in my tradition.	110	10.13
I participated in family planning or used contraception post-childbirth, which contradicts traditional beliefs in my community.	85	7.83
I challenged gender roles or expectations by involving my partner in ways not traditionally accepted during pregnancy or childbirth.	32	2.94
Total	**1086**	**100**

Table 30: Factors or influences encouraging healthcare services that contradict traditional practices

Response Category	*Multiple Response Frequency*	*Percentage*
Access to Evidence-Based Information	452	19.39
Medical Professional Recommendations	424	18.19
Safety and Health Outcomes	251	10.77
Research on Best Practices	235	10.08
Open Communication with Healthcare Providers	210	9.01
Informed Decision-Making	194	8.32
Community Health Programs	177	7.59
Peer Experiences	173	7.42
Cultural Sensitivity	154	6.61
Alignment with Personal Values	61	2.62
Total	**2331**	**100**

Integrating Cultural Sensitivity into Healthcare

The study reveals that 26.24% of respondents recommend training healthcare professionals in cultural competence, while 12.77% support integrating traditional practices where safe (**Table 31**). Notably, 74.4% advocate for bridging gaps between modern healthcare and traditional beliefs (T**able 32**). **Table 33** shows top suggestions: Community Health Worker Programs (19.52%) as the most preferred, followed by Cultural Competency Training (14.83%) to enhance understanding, and Community Engagement and Participatory Research (13.3%) to align health interventions with local values, ensuring cultural inclusivity and community acceptance.

Table 31: how can healthcare services be made more culturally sensitive and respectful of traditional beliefs and customs to address pregnancy and childbirth

Response Category	*Multiple Response Frequency*	*Percentage*
Provide training for healthcare professionals on cultural competence and understanding of diverse pregnancy and childbirth practices.	487	26.24
Incorporate traditional practices into healthcare services where possible and safe, in consultation with cultural experts.	237	12.77
Ensure that healthcare providers communicate effectively and respeafully with patients about their cultural needs and preferences.	218	11.75
Create spaces within healthcare facilities that are welcoming and respectful of cultural diversity and practices.	211	11.37
Develop and provide informational materials on pregnancy and childbirth that respect and acknowledge cultural variations.	161	8.67
Offer patients the option to consult with or include traditional healers or midwives as part of their healthcare team.	139	7.49
Facilitate community engagement initiatives to bet ter understand and integrate community-specific needs and values.	124	6.68
Implement flexible healthcare policies that allow for individualized care plans respecting patients' cultural backgrounds.	123	6.63
Encourage patient and family participation in decision-making processes to ensure culturally aligned healthcare choices.	114	6.14
Offer language support services to ensure clear communication for patients from diverse linguistic backgrounds.	42	2.26
Total	**1856**	**100**

Table 32: Acknowledgement of initiatives or educational programs to help bridge the gap between modern healthcare practices and traditional beliefs

Response Category	*Frequency*	*Percent*
Yes	372	74.40
No	128	25.60
Total	**500**	**100**

Table 33: Specific initiatives or educational programs that could help bridge the gap between modern healthcare practices and traditional beliefs

Response Category	*Multiple Response Frequency*	*Percentage*
Community Health Worker Programs	320	19.52
Cultural Competency Training for Healthcare Providers	243	14.83
Community Engagement and Participatory Research	218	13.3
Integrative Healthcare Services	197	12.02
Educational Workshops and Seminars	183	11.17
Traditional Healers Collaboration	163	9.95
Health Literacy Programs	125	7.63
Digital Health Education Platforms	75	4.58
School-Based Health Education	72	4.39
Policy Advocacy	43	2.61
Total	**1639**	**100**

Antenatal and Postnatal Care and the Presence of Skilled Birth Attendants

The study indicated that 94.6% reported being informed of the importance of being attended to by skilled birth attendants (**Table 34**), with 91% of respondents having a skilled birth attendant present during childbirth (**Table 35**).

Table 34: Provided information about the importance of having a skilled birth attendant during your ANC or PNC visits

Response Category	*Frequency*	*Percent*
Yes	473	94.60
No	27	5.40
Total	**500**	**100**

Table 35: Present of skilled birth attendant present during recent childbirth

Response Category	*Frequency*	*Percent*
Yes	455	91.00
No	45	9.00
Total	**500**	**100**

Influence of Skilled Birth Attendants

Skilled birth attendants influenced 93.85% of respondents to seek facility-based care (**Table 36**), promoting safe deliveries. However, financial constraints (30.21%) and transportation issues (27.08%) (**Table 37**) were key barriers for those without skilled attendants, highlighting challenges in accessing skilled care in resource-limited settings.

Table 36: How the presence of skilled birth attendants during childbirth influences decisions to give birth at a healthcare facility

Response Category	*Frequency*	*Percent*
It encouraged me to seek facility-based care	427	93.85
It did not influence my decision	28	6.15
Total	**455**	**100**

Table 37: Explanation for why pregnant mothers didn't have skilled birth attendants present during childbirth

Response Category	*Multiple Response Frequency*	*Percentage*
Financial constraints made it difficult to afford a skilled birth attendant or facility-based care.	29	30.21
I could not access a healthcare facility or skilled birth attendant due to distance or transportation issues.	26	27.08
I preferred a traditional home birth with a non-medical birth attendant, such as a traditional midwife or family member.	14	14.58
The onset of labor was too rapid or unexpected to reach a healthcare facility or summon a skilled attendant.	6	6.25
I had concerns or fears about receiving care in a healthcare facility or from a skilled birth attendant.	6	6.25
Cultural or family traditions favored unattended childbirth or the assistance of unskilled attendants.	6	6.25
Previous negative experiences with healthcare facilities or providers influenced my decision.	4	4.17
There was a lack of availability of skilled birth attendants or healthcare facilities in my area.	3	3.13
Personal preference for privacy or a familiar environment led me to choose childbirth without a skilled attendant.	2	2.08
Total	**96**	**100**

Antenatal Care (ANC), Postnatal Care (PNC), and Healthcare Levels

Most services were provided at secondary healthcare facilities (68.29%), followed by primary healthcare centres (28.86%) (**Table 38**). Minimal utilization of tertiary facilities (0.41%) and private facilities (2.44%) suggests potential barriers, such as accessibility issues or perceptions regarding the adequacy of lower-level facilities. These findings highlight the reliance on secondary and primary care levels and suggest a need to explore factors limiting the use of tertiary and private healthcare services.

Table 40: Provision of information on preventive measures and healthy practices during your ANC or PNC visits at the primary healthcare level

Response Category	*Frequency*	*Percent*
Yes	140	98.59
No	2	1.41
Total	**142**	**100**

Table 38: Level of healthcare facilities where primarily ANC or PNC services were received

Response Category	*Frequency*	*Percent*
Secondary healthcare facility (e.g., district hospital)	336	68.29
Primary healthcare center	142	28.86
Other (please specify) (Private facility)	12	2.44
Tertiary healthcare facility (e.g., regional or national hospital)	2	0.41
Total	**492**	**100**

Influence of Primary Healthcare in Establishing and Maintaining Health

Primary healthcare services significantly influenced health-seeking behaviour, with 59.16% of respondents finding them "very influential" and 33.80% "moderately influential" during pregnancy and childbirth (**Table 39**). Nearly all women (98.59%) reported receiving preventive information during ANC or PNC visits (**Table 40**). Key preventive measures provided included regular check-ups (13%), rest and sleep (10.48%), exercise (10.38%), nutrition (10.28%), and avoiding harmful substances (8.54%) (**Table 41**). These services and information play a vital role in promoting healthy practices and improving maternal and neonatal health outcomes.

Table 39: How primary healthcare services received during your pregnancy, childbirth, or newborn care influence healthcare-seeking behavior in establishing and maintaining a healthy physical and mental status

Response Category	*Frequency*	*Percent*
Very Influential	84	59.16
Extremely Influential	3	2.11
Moderately Influential	48	33.80
Slightly Influential	2	1.41
Not Influential at All	5	3.52
Total	**142**	**100**

Table 40: Provision of information on preventive measures and healthy practices during your ANC or PNC visits at the primary healthcare level

Response Category	*Frequency*	*Percent*
Yes	140	98.59
No	2	1.41
Total	**142**	**100**

Table 41: Key information on preventive measures and healthy practices given during ANC or PNC visits at the primary health level

Response Category	*Multiple Response Frequency*	*Percentage*
Regular Check-ups	134	13
Rest and Sleep	108	10.48
Exercise	107	10.38
Nutrition	106	10.28
Avoid Harmful Substances	88	8.54
Hydration	77	7.47
Immunizations	59	5.72
Regular Monitoring of Blood Pressure and Weight	55	5.33
Emotional Well-being	54	5.24
Education on Pregnancy and Childbirth	51	4.95
Screening for Infections	48	4.66
Screening for Gestational Diabetes	42	4.07
Birth Plan	39	3.78
Preparation for Breastfeeding	36	3.49
Partner Involvement	27	2.61
Total	**1031**	**100**

Influence of Secondary Healthcare Services in Dealing with Degeneration from a Healthy State

Table 42 highlights that 81.25% of participants experienced health issues during pregnancy, childbirth, or newborn care that required care beyond primary healthcare, indicating significant reliance on secondary-level services.

Table 43 shows that the availability of secondary healthcare was moderately (53.58%) to very influential (28.27%) for most respondents when deciding to seek care for pregnancy-related health complications.

Table 42: Experiencing health issues or complications during your recent pregnancy, childbirth, or newborn care that required medical care beyond primary healthcare

Response Category	*Frequency*	*Percent*
Yes	273	81.25
No	63	18.75
Total	**336**	**100**

Table 43: How availability of secondary healthcare facilities (e.g., district hospital) influence decisions to seek medical care when dealing with health issues during pregnancy, childbirth, or newborn care

Response Category	*Frequency*	*Percent*
Moderately Influential	180	53.58
Very Influential	95	28.27
Extremely Influential	7	2.08
Slightly Influential	53	15.77
Not Influential at All	1	0.30
Total	**336**	**100**

Integrated Approaches and Suggestions

Table 44 presents strategies for aligning healthcare levels. Participants emphasized improved communication (18.51%), enhanced training (14.83%), and standardized referral pathways (11.94%) as top priorities for better integration across primary, secondary, and tertiary care.

Table 45 identifies decision-making influences for ANC/PNC use. Most participants (77.19%) were motivated by protective factors, while 21.59% cited alleviating factors, and only 1.22% mentioned aggravating factors. These findings suggest that preventive health awareness and proactive care promotion play a critical role in encouraging timely maternal healthcare utilization.

Table 44: how can the different levels of healthcare (Primary, Secondary, and Tertiary) be better aligned (work together) to support pregnant women and newborns

Response Category	*Multiple Response Frequency*	*Percentage*
Improved Communication	468	18.51
Enhanced Training Programs	375	14.83
Standardized Referral Pathways	302	11.94
Community Engagement	276	10.91
Utilization of Technology	272	10.76
Quality Assurance Measures	206	8.15
Feedback Mechanisms	180	7.12
Streamlined Access to Resources	179	7.08
Continuous Monitoring and Evaluation	159	6.29
Multi-disciplinary Teams	112	4.41
Total	**2529**	**100**

Table 45: Factors influencing Maternal decision to seek ANC or PNC services

Response Category	*Frequency*	*Percent*
Protective factors (e.g., preventive care)	379	77.19
Alleviating factors (e.g., addressing existing health issues)	106	21.59
Aggravating factors (e.g., complications or risks)	6	1.22
Total	**491**	**100**

DISCUSSION

Participant Residency

The study included 500 participants, with 74.80% attending Bo Government Hospital (urban) and 25.20% attending Tikonko Maternity Home (rural). This disparity reflects higher urban healthcare utilization due to better infrastructure, accessibility, and service availability [12]. These findings emphasize the need for targeted interventions to improve rural healthcare access and maternal health outcomes.

Age Distribution for Pregnant Women, Newborn Women, and Newborns

Pregnant women's mean age was 25 years (skewness = 0.83), while newborn mothers had a mean age of 24 years (skewness = 1.18), reflecting a younger demographic typical of Sub-Saharan Africa [13]. Most newborns were 29 days to 2 months old (33.98%), followed by 3 to 5 months old (28.64%), highlighting a focus on early postnatal care during the critical neonatal phase [14].

Education Level

Most participants had secondary education (53.60%), followed by primary (28.40%), tertiary (8.00%), and no formal education (10.00%). Higher education levels correlate with better maternal health-seeking behaviour, underscoring the importance of education in improving healthcare outcomes [15].

Marital Status and Religion

Nearly half of the participants were married (46.60%), with 31.60% single. Married women benefit from greater support and resources, improving maternal health-seeking behaviour [16]. Religious composition was balanced between Islam (52.40%) and Christianity (47.40%), suggesting interventions should engage religious leaders to influence health-seeking behaviours positively [17].

Occupation, Tribe, and Family Type

Students (34.80%), housewives (22.60%), and businesswomen (30.80%) dominated the sample, reflecting diverse socio-economic needs [18]. The Mende tribe comprised 63.00% of participants, followed by Temne (18.00%), highlighting the cultural context's role in shaping maternal health behaviours [19]. Most families were monogamous (86.80%), with polygamous families (13.20%) potentially facing more resource constraints [5].

Household Size, Income, and Pregnancy Experience

The mean household size was 5.30, and the mean monthly income was 335.03 NLE, with significant financial disparities affecting healthcare access [20,21]. Participants had a mean of 2 pregnancies, emphasizing the need for maternal education and services across all parity levels [22].

Health-Seeking Behaviour During Pregnancy and After Childbirth

There was a 100% utilization rate of antenatal care (ANC) services among participants, demonstrating the success of maternal health outreach programs in the region. Most participants (71%) accessed ANC through public healthcare facilities, reflecting their affordability and accessibility in low-resource settings. A significant proportion of women attended the recommended 3 to 4 ANC visits (44.4%), with 41.2% exceeding this, aligning with World Health Organization guidelines for early monitoring and intervention during pregnancy [23,24].

Nearly all participants (99.03%) delivered in healthcare facilities, showcasing a high institutional delivery rate, critical for reducing maternal and neonatal mortality through skilled birth attendance and emergency obstetric care [25]. The study highlights the effectiveness of

government-supported maternal health services in promoting ANC and facility-based deliveries, which are pivotal for improved maternal and neonatal health outcomes.

Traditional Beliefs and Customs

Traditional beliefs and customs influenced pregnancy and childbirth by 52.40%, emphasizing their continued relevance, particularly in rural areas. Approximately 40.40% observed or participated in traditional practices such as ceremonies (17.91%), herbal remedies (17.68%), dietary restrictions (13.96%), and traditional birthing methods (12.95%). While these practices are culturally significant, challenges arise when they conflict with evidence-based medical care, highlighting the importance of culturally sensitive healthcare approaches [7,11,26,27].

Traditional beliefs shaped healthcare-seeking behaviour for 37.60% of respondents, primarily influencing preferences for traditional healers or midwives (20.71%) and specific lifestyle practices (15.44%). However, 62.40% cited modern healthcare accessibility, education, and awareness as stronger determinants of their health decisions. For 65% of respondents, healthcare choices sometimes contradicted traditional customs, indicating a shift towards evidence-based practices driven by improved healthcare access and awareness [28,29,30,34].

While 72% of respondents indicated that traditional beliefs did not affect their antenatal or postnatal care decisions, 16% experienced negative influences, potentially discouraging service utilization. To address this, integrating trained traditional birth attendants into formal healthcare systems could bridge the gap between traditional and modern practices, ensuring safety and cultural sensitivity [31-33].

These findings highlight the dual importance of respecting cultural norms and promoting education on modern healthcare benefits. A WHO-endorsed culturally appropriate healthcare model that integrates traditional practices with evidence-based care can help improve maternal and newborn health outcomes in resource-limited settings [35].

Integrating Cultural Sensitivity into Healthcare

The study highlights the importance of culturally sensitive care, with 26.24% of respondents advocating for healthcare provider training in cultural competence to improve outcomes, satisfaction, and trust [36]. Additionally, 74.4% supported initiatives to bridge modern healthcare and traditional beliefs, promoting culturally integrated approaches that enhance maternal and newborn health [6,8]. These findings underscore the need for evidence-based strategies that respect cultural practices while fostering dialogue between providers and communities to improve healthcare acceptance and utilization.

Antenatal and Postnatal Care and the Presence of Skilled Birth Attendants

Ninety-seven percent of women accessed antenatal/postnatal care (ANC/PNC), and 91% had skilled birth attendants during childbirth, emphasizing the importance of skilled professionals in improving maternal and neonatal outcomes [9]. Skilled attendants also encouraged 93.85% of women to seek facility-based care, promoting safer childbirth practices [38]. However, financial constraints (30.21%) and transportation issues (27.08%) hindered access, reflecting systemic barriers in low-resource settings that require targeted interventions to enhance accessibility [39]. These findings align with global recommendations advocating for skilled birth attendance to reduce maternal and neonatal

mortality [31].

Healthcare for Newborns

96.12% of respondents sought healthcare for newborns, with 96.46% prioritizing skilled providers. While awareness of neonatal care is high, geographic and logistical barriers persist. Expanding neonatal services, especially in rural areas, is critical to improving survival rates and addressing preventable neonatal complications [40].

Encouraging Skilled Birth Attendance

Encouraging skilled birth attendance involves strategies such as training programs (22.6%), mandatory skilled attendance policies (13.91%), and improving healthcare access (12.64%) [10]. Community education, government-subsidized services, and mobile health clinics also address disparities, aligning with successful global practices in low-resource settings [41,42].

Antenatal Care (ANC) and Postnatal Care (PNC) Services

Antenatal and postnatal care (ANC/PNC) services were utilized by 98.40% of women, underscoring high engagement with maternal healthcare, critical for monitoring health and addressing complications [43]. Secondary healthcare facilities were preferred (68.29%) over primary (28.86%) and tertiary (0.41%) facilities, reflecting perceptions of balanced accessibility and quality [44-46]. The low use of tertiary facilities highlights barriers such as cost, distance, and awareness, necessitating targeted interventions to improve access to specialized care.

CONCLUSION

The urban-rural disparity emphasizes the need for improved rural healthcare infrastructure.

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