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Determinants of Skilled Delivery Service Utilization in the Ada Foah Subdistrict of the Greater Accra Region Ghana

Halidu Imurana

imranbenkhalid@yahoo.com

University of Lucknow

Anoop Kumar Bhartiya

University of Lucknow

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Abstract

Skilled delivery uptake plays a crucial role in reducing global maternal mortality rates. While the Sustainable Development Goals set a target for a Maternal Mortality Ratio (MMR) of under 70 per 100,000 live births by 2030, Ghana's MMR remains worryingly high at 319. In the Ada-Foah sub-district, reports indicate a concerningly low use of skilled birth attendants. This study aimed to uncover the reasons behind this low uptake of skilled delivery in the region. Researchers carried out a cross-sectional survey at 10 Child Welfare Clinics in Ada-Foah, sampling 295 mothers who gave birth between January and December of the previous year. They collected data using structured questionnaires and analyzed it with descriptive statistics, chi-square tests, and binary logistic regression, all at a significance level of 0.05. Findings revealed a high skilled delivery uptake rate of 80%. Statistical analysis showed that marital status, partner’s education level, and the participant's employment status significantly influenced uptake. When it comes to skilled delivery, several key factors come into play, such as cost, availability of transport, the attitude of staff, past attendance at antenatal care, and how affordable the services are. Interestingly, the identity of the main decision-maker in healthcare didn’t seem to have a strong link to the choices made regarding delivery. The uptake of skilled delivery is shaped by a complex mix of socio-demographic factors, cultural views, accessibility, and the overall quality of care. To keep improving these rates, it’s essential for the health authorities in the district, opinion leaders, NGOs, and community members to take focused actions that tackle transport and affordability issues while also boosting the quality of maternal care services.

INTRODUCTION

The Sustainable Development Goals (SDGs) cross-cutting theme of fairness is recognized worldwide to advance maternal and child health (WHO, 2013). There has been a global push to promote skilled delivery services, all aimed at boosting mothers’ survival rates. However, decreasing maternal mortality in terms of percentage has not been achieved notwithstanding the uptake of skilled delivery, hence the greater disparity being reported as compared to other interventions concerning maternal mortality (Kachikis, Moller, Allen, Say, & Chou, 2018)

According to (Gabrysch & Campbell, 2013), maternal mortalities of more than five hundred thousand (500,000) occur yearly across the globe, including four million newborns and three million stillborn babies. It is heartbreaking to see that many lower- and middle-income countries are facing a staggering number of deaths simply because they lack access to modern medical care. Around the world, contemporary medical practices are essential in helping to prevent maternal mortality. It's essential to have skilled birth attendants who can manage normal deliveries, spot complications, and refer patients quickly when needed, as many obstetric issues can be unpredictable and often arise during childbirth. Access to these skilled professionals is key to improving maternal survival rates, which is why the Sustainable Development Goals (SDG 3) include the number of pregnant women using skilled delivery services as an important indicator. This access not only helps prevent stillbirths but also boosts newborn survival rates. However, the responsibilities of healthcare providers, like midwives and doctors,

can extend beyond traditional health settings such as community CHPS compounds, health centers and others. In lower-income countries, the best strategy is to ensure that pregnant women are placed in health centers where they can receive timely referrals. In practice, choosing skilled delivery services in many nations is equivalent to giving birth in a healthcare setting.

METHODOLOGY

A descriptive design was adopted.

Cochran formula was applied here, which is expressed as follows;

$n = \frac{Z^2 \times pq}{e^2}$ n = sample size, Z = confidence level of 95% (with a standard value of 1.96), e = margin of error set at 0.05, p = prevalence of skilled delivery at 22.5%, and q = 1 - p.

$$n = \frac{Z^2 \times pq}{e^2} = \frac{1.96^2 \times 0.225\,(1 - 0.225)\,.}{(0.05)^2} = 267.95$$

To gather a representative sample, we employed a multistage sampling technique. In the Ada-Foah sub-district, there are currently 34 static and outreach points focused on growth monitoring and promotion for children aged 0–5 years. From these points, we randomly picked 10 using a simple balloting method. After finalizing our selection, we distributed a total sample size of 295 participants evenly across the 10 outreach and static points, which means each child welfare clinic had about 29 participants. Additionally, we randomly selected 5 more participants from the 10 clinics to achieve our final total of 295 respondents.

RESULTS

Socio-demographic characteristics of respondents

Table 4.1 presents the findings from our study, which involved interviewing 295 mothers. The majority of these mothers were in the age group of 25–34 years, while 37.29% fell within the age 15–24, 16.95% were between 35–44, and a small 2.71% were in the 45–49 age range. An impressive 92.2% identified as Christians. When it comes to education, about one-fifth (19.66%) of the respondents did not have any form of education, 29.15% completed primary education, 39.32% had Junior High School (JHS) education, 8.81% attended Senior High School (SHS) or vocational/technical schools, and just 3.05% achieved a tertiary level of education. In terms of marital status, a significant 78.64% were married, 17.29% were single, and 4.07% were either divorced, widowed, or separated. Looking at their partners, most (34.24%) were having Junior High School education and 8.47% reaching tertiary. On the employment front, a notable 73.22% of the participants were employed, and a striking 83.05% had their first child between the ages of 15 and 24 (see Table 1 for more details).

Table 1
Socio-demographic characteristics of respondents

Variables	Frequency (N = 295)	Percentage
Age		
15–24 years	110	37.29
25–34 years	127	43.05
35–44 years	50	16.95
45–49 years	8	2.71
Religion		
Christians	272	92.2
Islamic	14	4.75
Traditional	9	3.05
Educational level		
No education	58	19.66
Primary	86	29.15
JHS	116	39.32
SHS/VOC/TECH	26	8.81
Tertiary	9	3.05
Marital status		
Divorced/Widow/separated	12	4.07
Married/cohabitating	232	78.64
Single	51	17.29
Partner's education		
No education	42	14.24
Primary	70	23.73
JHS	101	34.24
SHS/VOC/TECH	57	19.32
Tertiary	25	8.47
Employment status		

Variables	Frequency (N = 295)	Percentage
Age		
Employed	216	73.22
Unemployed	79	26.78
Age at first birth		
15-24years	245	83.05
25-34years	50	16.95

uptake of skilled delivery

From the 295 respondents involved in this research, a significant 80.3% (that's 237 women) opted for skilled delivery, while 19.7% (or 58 women) went for unskilled delivery. This trend can be attributed to many respondents delivering outside the subdistrict, often due to referrals or their partners' work locations, which explains the lower rates of skilled delivery in the area. The estimated confidence interval for skilled delivery uptake stands at 95%, ranging from 75.3% to 84.7%.

Now, regarding socio-cultural practices among pregnant women, Fig. 3 illustrates some interesting trends. The most common practices included eating clay (55.4%), delaying antenatal care visits until the second trimester or later (36.2%), and a notable 35.1% of pregnant women not attending health facilities until they were ready to deliver.

Reasons for low uptake of skilled delivery

According to Fig. 4.3, more than a third (36.5%) of respondents identified financial constraints and challenges as major reasons for not delivering at health facilities. Additionally, 22.0% of women pointed out that a lack of transportation was an issue, while 21.3% mentioned the negative attitudes of healthcare providers as barriers to utilizing these facilities. Other reasons, such as family preferences (3.4%), the presence of traditional birth attendants (3.0%), and language barriers (3.0%), were cited less often as factors influencing the decision not to deliver at health facilities.

Topics discussed or counselled on during ANC visits.

In the study, a notable portion of respondents shared that they discussed important topics like birth preparedness (72.3%), proper nutrition (57.1%), and recognizing warning signs (55.4%) while at the ANC clinic. Other key subjects included family planning (47.3%), the significance of supervised delivery (45.3%), child welfare clinics (34.5%), and breastfeeding practices (33.1%) (See Fig. 5).

- **Association between socio-demographic characteristics and uptake of skilled delivery.**

The Pearson's chi-square test was used to explore how socio-demographic factors relate to the use of skilled delivery among the study participants. As shown in table 4.2, key factors like marital status, the education level of partners, and their employment status were significantly linked to the choice of skilled delivery (p-value < 0.05). Out of 232 married women, a notable 85.34% opted for skilled delivery, while 83.33% of the 12 women who were divorced, widowed, or separated did the same. In stark contrast, only 56.86% of the 51 single women chose skilled delivery. The findings revealed that women with partners who had higher education levels were much more likely to use skilled delivery. For example, the uptake among women whose partners had no formal education was quite low at 64.29%, compared to those with partners who had primary (78.57%), JHS (83.17%), SHS/Vocational/technical (84.21%), and tertiary (92.0%) education. Interestingly, the data also showed that unemployed women had a significantly higher uptake of skilled delivery compared to their employed peers (88.61% vs. 77.31%), as illustrated in Table 2.

Table 2
Association between Socio-demographic characteristic and delivery type

Variables	Uptake of skilled delivery				
	Total	No (%)	Yes (%)	Chi-square	P-value
Age				2.23	0.526
15–24 years	110	22 (20)	88 (80)		
25–34 years	127	22 (17.32)	105 (82.68)		
35–44 years	50	11 (22)	39 (78)		
45–49 years	8	3 (37.5)	5 (62.5)		
Religion				3.61	0.057
Christians	272	50 (18.38)	222 (81.62)		
Non-Christians	23	8 (34.78)	15 (65.22)		
Educational level				7.51	0.111
No formal education	58	17 (29.31)	41 (70.69)		
Primary	86	19 (22.09)	67 (77.91)		
JHS	116	18 (15.52)	98 (84.48)		
SHS/VOC/TECH	26	4 (15.38)	22 (84.62)		
Tertiary	9	0 (0)	9 (100)		
Marital status				21.54	< 0.001***
Divorced/Widow/separated	12	2 (16.67)	10 (83.33)		
Married/cohabitating	232	34 (14.66)	198 (85.34)		
Single	51	22 (43.14)	29 (56.86)		
Partner's educational level				10.2	0.037*
No formal education	42	15 (35.71)	27 (64.29)		
Primary	70	15 (21.43)	55 (78.57)		
JHS	101	17 (16.83)	84 (83.17)		
SHS/VOC/TECH	57	9 (15.79)	48 (84.21)		
Tertiary	25	2 (8)	23 (92)		
Employment status				4.67	0.031*

Variables	Uptake of skilled delivery				
	Total	**No (%)**	**Yes (%)**	**Chi-square**	**P-value**
Employed	216	49 (22.69)	167 (77.31)		
Unemployed	79	9 (11.39)	70 (88.61)		
Age at first birth				0.21	0.648
15-24years	245	47 (19.18)	198 (80.82)		
25-34years	50	11 (22)	39 (78)		

%: row percentage. *: p-value < 0.05. **: p-value < 0.01. ***: p-value < 0.001.

- **Association between decision making process and delivery type.**

According to Table 3, individuals involved in making health and pregnancy-related decisions didn't show a significant link to the use of skilled delivery services as indicated by the Pearson’s chi-square test of association (p-value > 0.05).

Table 3
Association between decision making process and delivery type

Variables		Uptake of skilled delivery			
	Total	No (%)	Yes (%)	Chi-square	P-value
Decision to visit facility when sick				1.48	0.476
both	117	19 (16.24)	98 (83.76)		
husband	103	22 (21.36)	81 (78.64)		
wife	75	17 (22.67)	58 (77.33)		
Deciding number of children and when.				2.69	0.261
both	159	27 (16.98)	132 (83.02)		
husband	85	17 (20)	68 (80)		
wife	51	14 (27.45)	37 (72.55)		
Seeking permission before doing anything				1.15	0.562
both	92	15 (16.3)	77 (83.7)		
husband	136	30 (22.06)	106 (77.94)		
wife	67	13 (19.4)	54 (80.6)		
Decision on expenditure				0.76	0.685
both	88	18 (20.45)	70 (79.55)		
husband	136	24 (17.65)	112 (82.35)		
wife	71	16 (22.54)	55 (77.46)		
Deciding place of delivery				3	0.223
both	85	22 (25.88)	63 (74.12)		

Variables		Uptake of skilled delivery			
	Total	No (%)	Yes (%)	Chi-square	P-value
husband	83	15 (18.07)	68 (81.93)		
wife	127	21 (16.54)	106 (83.46)		
Decision on ANC attendants				0.21	0.900
both	76	16 (21.05)	60 (78.95)		
husband	74	15 (20.27)	59 (79.73)		
wife	145	27 (18.62)	118 (81.38)		
Decision on income				0.97	0.614
both	104	23 (22.12)	81 (77.88)		
husband	139	24 (17.27)	115 (82.73)		
wife	52	11 (21.15)	41 (78.85)		

%: row percentage. *: p-value < 0.05. **: p-value < 0.01. ***: p-value < 0.001.

- **Association between other background characteristic of study participants and uptake of skilled delivery.**

Table 4 highlights some interesting traits of the participants closely linked to the uptake of skilled delivery. It turns out that the uptake was notably higher among those from communities without cultural practices surrounding delivery, with rates of 81.65% compared to just 67.86% for those with such practices. Additionally, respondents who traveled to health facilities by taxi or car (83.87%) or motorbike (84.03%) were much more inclined to choose skilled delivery compared to those who walked there (66.67%). Additionally, a notably higher percentage of respondents who attended antenatal care (ANC) during their last pregnancy opted for skilled delivery, with 83.2% choosing this option versus just 64.44% for those who skipped ANC. Finally, a remarkable 89.47% of participants rated the quality of care at their health facility as "very good" went for skilled delivery, in contrast to 70.27% who rated it as "average" and 77.3% who found it "good" (see Table 4).

Table 4
Association between other background factors and uptake of skilled delivery

Variables		Uptake of skilled delivery			
	Total	No (%)	Yes (%)	Chi-square	P-value
Women have power to make health decisions				2.33	0.311
Don't know	30	4 (13.33)	26 (86.67)		
No	123	29 (23.58)	94 (76.42)		
Yes	142	25 (17.61)	117 (82.39)		
Recommendation of place of delivery				18.79	< 0.001***
TBA's home/home	19	11 (57.89)	8 (42.11)		
Health facility	276	47 (17.03)	229 (82.97)		
Community have cultural practices during delivery				3.05	0.081
No	267	49 (18.35)	218 (81.65)		
Yes	28	9 (32.14)	19 (67.86)		
Means of transport to health facility				8.37	0.015*
Motorbike	114	19 (16.67)	95 (83.33)		
Taxi/car	124	20 (16.13)	104 (83.87)		
Walk	57	19 (33.33)	38 (66.67)		
Time of travel to health facility.				1.47	0.225
< 1 hour	274	56 (20.44)	218 (79.56)		
1 to 3 hours	21	2 (9.52)	19 (90.48)		

Variables		Uptake of skilled delivery			
	Total	No (%)	Yes (%)	Chi-square	P-value
Decider to go to health facility				2.6	0.272
Self/self-included	119	19 (15.97)	100 (84.03)		
Partner only	156	33 (21.15)	123 (78.85)		
Others	20	6 (30)	14 (70)		
Attended ANC at last pregnancy				8.49	0.004**
No	45	16 (35.56)	29 (64.44)		
Yes	250	42 (16.8)	208 (83.2)		
Checked baby health after birth				56.66	< 0.001***
No	29	21 (72.41)	8 (27.59)		
Yes	266	37 (13.91)	229 (86.09)		
Quality of care at health facility				8.35	0.015*
Average	37	11 (29.73)	26 (70.27)		
Good	163	37 (22.7)	126 (77.3)		
Very good	95	10 (10.53)	85 (89.47)		
Experience of misconduct from health provider				1.00	0.317
No	264	54 (20.45)	210 (79.55)		
Yes	31	4 (12.90)	27 (87.10)		

%: row percentage. *: p-value < 0.05. **: p-value < 0.01. ***: p-value < 0.001.

- **Factors that affect the uptake of skilled delivery.**

A binary logistic regression model was adopted in analyzing what influences this choice among the participants in our study. As shown in the adjusted model in table 4.5, several key factors stood out: marital status, the education level of partners, whether respondents recommended a place for delivery, if the newborns were examined during postpartum, how participants rated quality of care provided by the health facility. For instance, married or cohabiting mothers had an adjusted odds of opting for skilled delivery that was three times higher than that of single mothers (AOR: 3.6%, 95% CI: 1.54–8.42, p-value = 0.003). Similarly, mothers whose partners had a Junior High School (JHS) education were three times more likely to choose skilled delivery compared to those whose partners didn't have any form of education (AOR: 3.31, 95% CI: 1.15–9.51, p-value = 0.026). The odds were even more striking for those whose partners had Senior High School (SHS), vocational, or technical education, with a fourfold increase in likelihood compared to those with uneducated partners (AOR: 4.02, 95% CI: 1.17–13.77, p-value = 0.027). Additionally, mothers who were willing to recommend a health facility for delivery to their friends had an adjusted odds ratio that was five times greater than those who would suggest a Traditional Birth Attendant (TBA) for delivery (AOR: 4.93, 95% CI: 1.31–18.6, p-value = 0.019). Furthermore, the adjusted odds of opting for skilled delivery were notably higher among those who rated the quality of care at the health settings as very good, compared to those who viewed it as average (AOR: 2.65, 95% CI: 1.06–6.63, p-value = 0.038) (see Table 5).

Table 5
Factors affecting the uptake of skilled delivery

Variables	Unadjusted logistic model		Adjusted logistic model	
	UOR (95% CI)	P-value	AOR (95% CI)	P-value
Marital status				
Single	ref		Ref	
Divorced/Widow/separated	3.79 (0.75, 19.09)	0.106	5.78 (0.76, 44.1)	0.091
Married/cohabitating	4.42 (2.28, 8.57)	< 0.001***	3.6 (1.54, 8.42)	0.003**
Partners educational level				
No formal education	ref		Ref	
Primary	2.04 (0.87, 4.77)	0.101	2.37 (0.81, 6.97)	0.116
JHS	2.75 (1.21, 6.22)	0.016*	3.31 (1.15, 9.51)	0.026*
SHS/VOC/TECH	2.96 (1.14, 7.67)	0.025*	4.02 (1.17, 13.77)	0.027*
Tertiary	6.39 (1.32, 30.92)	0.021*	3.17 (0.58, 17.4)	0.184
Employment status				
Employed	ref		Ref	
Unemployed	2.28 (1.06, 4.9)	0.034*	1.92 (0.77, 4.74)	0.159
Recommend place of delivery				
TBA	ref		Ref	
Health facility	6.7 (2.56, 17.55)	< 0.001***	4.93 (1.31, 18.6)	0.019*
Means of transport to health facility				
Walk	ref		Ref	
Motorbike	2.5 (1.19, 5.23)	0.015*	1.39 (0.48, 3.99)	0.545
Taxi/car	2.6 (1.25, 5.39)	0.01*	1.58 (0.54, 4.64)	0.402

Variables	Unadjusted logistic model		Adjusted logistic model	
	UOR (95% CI)	P-value	AOR (95% CI)	P-value
Marital status				
Attended ANC at last pregnancy				
No	ref		Ref	
Yes	2.73 (1.36, 5.47)	0.005**	0.97 (0.34, 2.79)	0.958
Checked baby health after birth				
No	ref		Ref	
Yes	16.25 (6.7, 39.38)	< 0.001***	33.1 (10.83, 101.12)	< 0.001***
Quality of care at health facility				
Average	ref		Ref	
Good	0.69 (0.31, 1.54)	0.368	1.09 (0.37, 3.25)	0.876
Very good	2.5 (1.18, 5.29)	0.017*	2.65 (1.06, 6.63)	0.038*

UOR: unadjusted odds ratio. AOR: adjusted odds ratio. CI: confidence interval. ref: reference category. *: $p < 0.05$. **: $p < 0.01$. ***: $p < 0.001$.

Factors that can boost the uptake of skilled delivery

A significant portion of the study participants, about 43.4%, pointed out that educating people on the significance of antenatal care (ANC) with supervised delivery could really enhance the uptake of skilled delivery. Meanwhile, 30.2% believed that lowering the costs of delivery and medications would make a difference. Additionally, 17.3% felt that enhancing the quality of care at health facilities is crucial, while 9.5% suggested that providing adequate delivery equipment could help. Lastly, 4.4% mentioned that fixing the poor roads leading to health facilities could also play a role in increasing the uptake of skilled delivery (see Fig. 6).

DISCUSSION

The primary aim of this study was to explore the socio-demographic factors that influence women's decisions to utilize skilled delivery services in the Ada-Foah sub-district. The results revealed a strong link between these characteristics and the likelihood of opting for skilled delivery. In this area, it was

noted that women of reproductive age often gave birth at a young age, specifically between 15 and 24 years. This trend appears to be largely influenced by a lack of education and challenging socio-economic conditions. Age is often offered as a substitute for amassed experience, comprising the utilization of uptake of skilled delivery by a pregnant woman (Burgard, 2004). Household decision-making is influenced by mature women who were extra buoyant and effective compared to adolescents who were pregnant (Glei etal, 2003). Moreover, the likelihood of developing complications during delivery is higher in older women hence the need to utilize uptake of skilled delivery. (Bell et al., 2003). But some studies also found that expectant mothers (adolescents) are likely to seek facility delivery more compared to older expectant mothers who might utilize TBAs or relatives (Navaneethan & Dharmalingam, 2002). several studies revealed that a few possible reasons that could shed light on why this is the case "Maternal education is consistently and strongly associated with all types of health behavior" (Bell etal, 2003). Other strong reasons why educational level is strongly associated with uptake of skilled deliveries are; enhanced knowledge on the benefits of preventive and curative health care, greater openness to information related to health, enhanced relationship with the healthcare providers, understanding the contemporary medical culture, access to financial resources and health insurance, more control over resources within the household and prudent spending, more independent relationship and better communication with the spouse, more decision-making power, improved self-worth and self-confidence and better coping abilities. (Thaddeus & Maine, 1994).

A husband’s level of education can really open his eyes to the world of modern medicine. It helps him understand the importance of skilled delivery, which can be a motivating factor to connect with healthcare professionals to seek the right care. Additionally, when there are fewer restrictions on a spouse's freedom and decision-making, it can lead to a greater acceptance of skilled delivery. The husband’s education also ties into factors like occupation and household wealth, and interestingly, some studies even use his education as a way to gauge the household's socioeconomic status. Majority of the studies identified that educational status is associated with utilization of skilled delivery when husband’s education was used as a measure, even though the effect is insignificant compared to the mother's own education (Short & Zhang, 2004). Few studies considered the occupation of women but majority of the studies identified women who are farmers not to or less utilize healthcare compared those in other profession (Nwakoby, 1994; Hodgkin, 1996). Interestingly, other studies have shown that women who are formally employed tend to seek healthcare more actively. Contrarily, it was the opposite in a study conducted in two southern India states and Nepal (Stekelenburg et al., 2004). Uptake of skilled delivery by pregnant women is largely influenced by their culture, religion and ethnic background since the independence of a woman depends solely on the above-mentioned factors (Gyimah et al., 2006)

Fishbein (2000), suggest that the main reason why women who are Christian or Muslim usually seek healthcare compared to the traditional and other religions is that women of the traditional and other religion are more addicted to their cultural belief’s norms and values. Some other studies have backed this up, suggesting that women in traditional and various religious contexts may come across as old-fashioned, often placing their trust in them. This research focused on the second objective showed cultural views on women play a crucial role in the acceptance of skilled delivery. Interestingly, the study

revealed that a majority of 117 women (82.39%) feel empowered to decide for themselves, compared to 94 women (76.42%) who believe that women lack decision-making power. This is contrary to the findings of the study that majority of the women in many countries utilize healthcare based on the decisions of their husbands or other family members (Furuta &Salway, 2006).

The use of skilled delivery services among Muslims and traditional believers living in Ghana is notably lower than that of Christians, yet no significant ethnic differences were found. Most studies conducted in this area, like the one by Bell et al. (2003), did not reveal any ethnic or religious disparities. This aligns with our findings, where a striking 272 women, or 92.2%, who gave birth at health facilities were Christians, compared to just 14 (4.75%) from Islamic backgrounds and 9 (3.05%) from traditional religions. In Afghanistan, 87% of the women in that communities asked for permission before visiting a health facility, whilst 45%of the women said they believed in the right to be beaten by their husbands when they disobey them (Samson, 2012) This is contrary to the findings of the study that majority 98(83.76%) respondents indicated that seeking permission before visiting hospital was a mutual consent thus both husband and wife whilst 81(78.64%) said they sought permission from the husband.

When it comes to accessing health facilities, this study revealed that over a third (36.5%) of participants pointed to economic issues as a major barrier to delivering at these facilities. Additionally, 22.0% of women mentioned a lack of transportation, while 21.3% cited the poor attitudes of healthcare providers as reasons for not seeking care. Other factors like family preference (3.4%), the availability of traditional birth attendants (3.0%), and language barriers (3.0%) were mentioned less frequently. This aligns with another study that highlighted the scarcity of transportation in the area, indicating that many facilities are quite far away, which often leads women to look for alternative delivery options within the sub-district. The obstacle effect of distance is stronger when combined with lack of transport, poverty and poor roads (Thaddeus & Maine, 1994). Moreover, it has been a topic of discussion that "distance to hospital also captures other aspects of remoteness such as poor road infrastructure, poor communication between communities, poverty, limited access to information, strong adherence to traditional values and other disadvantages that are difficult to measure quantitatively" (Reynolds et al., 2006).

When it comes to the fourth objective, the study uncovered a significant link between how people perceive the quality of care at health settings and their likelihood of opting for skilled delivery. The choice to go for skilled delivery was notably swayed by the negative experiences that pregnant women had, which closely tied into their views on the quality of medical care. As noted by Thaddeus & Maine in 1994, "Quality assessment largely depends on people's own experiences with the health system and those of people they know." The findings from the study revealed that 27 participants, or 87.10%, rated the quality of care they received as very good, while 126 participants (77.3%) considered it good, and 26 participants (70.27%) felt it was average. This is consistent with a study which found that rise in skilled delivery uptake was influenced by the good attitude of healthcare professionals without disrespect, yelling and dejection but full of reassurance and courteousness (Baral et al., 2010). It’s worth mentioning that only a handful of studies have evaluated the quality of care. A study by a Vietnamese found that a

significant number of pregnant women with experience in childbirth ranked quality of care higher compared to "communication and conduct of personnel" but other pregnant women who utilized the TBAs or relatives ranked quality of care at the facility as very low (Duong et al., 2004). The study revealed some interesting findings: 27 participants, or 87.10%, reported experiencing misconduct from healthcare providers during their delivery, while 210, which is 79.55%, said they had no such experiences. This aligns with other research that highlighted how staff attitudes and the quality of care were significant factors in nearly all studies examining the uptake of skilled delivery. Many women expressed a preference for using traditional birth attendants or family members, largely due to their dissatisfaction with the disrespectful and careless behavior they encountered from healthcare providers. Also, the culturally unfitting care of not openly expressing pain when in labour that is admonished by healthcare providers (Kyomuhando, 2003).

The study revealed that women who gave birth in healthcare facilities rated the quality of skilled delivery significantly higher than those who delivered at home. However, when it came to “communication and conduct of personnel,” the scores were similar for both groups. Additionally, the respondents expressed a strong belief that health facilities could provide better care, but the costs and transportation challenges, especially at night, often prevent them from seeking that higher quality of care.

CONCLUSION

This study concludes by shedding light on a significant link between the socio-demographic characteristics of women in the Ada-Foah sub-district and their likelihood of choosing skilled delivery. The age at which women are giving birth in this region, along with low education levels, has led to a lack of health-seeking behaviors, such as family planning and opting for hospital deliveries. Cultural perceptions surrounding women of reproductive age in Ada-Foah also influence their decisions about seeking skilled delivery. The research found that some traditional practices remain strong in the community, which has obstructed the adoption of skilled delivery among these women. Many shy away from facility deliveries due to cultural norms regarding privacy and preferred positions during childbirth (often shaped by traditional birth attendants), as well as the belief that in-laws should have a say in decision-making. Access to healthcare facilities is yet another factor that impacts women's choices about skilled delivery in Ada-Foah. A lot of expectant women don’t consider skilled delivery because the thought of walking several kilometers to reach a health facility is daunting, especially during labor, and it becomes even more challenging if labor starts at night when transportation options are often scarce. When transport is available, the costs can be prohibitive, as many drivers tend to charge exorbitant rates, particularly at odd hours. Additionally, perceptions of the quality of care at health settings significantly impact the decision to seek skilled delivery. Some women have faced unprofessional behavior from healthcare providers during their experiences, leading them to prefer being attended by a traditional birth attendant or a family member instead. Facility rules that restrict family members from the labor ward, the presence of male doctors and midwives during delivery, and sometimes the enforcement of specific delivery positions that clash with what the clients expect have all contributed to a perception of inadequate care

Declarations

Acknowledgments

We would like to take a moment to express our heartfelt thanks to the District Health Directorate of Ada-Foah for allowing us to carry out this study. A big shoutout goes to the amazing staff at the 10 Child Welfare Clinics for their invaluable logistical support during our data collection. Most importantly, we are incredibly grateful to the mothers who took part in this survey, sharing their time and their meaningful experiences with us.

Conflict of Interest

The authors would like to emphasize that this research was conducted independently, without any commercial or financial connections that could be perceived as a conflict of interest.

Ethical Statement

The study protocol was reviewed and approved by the Ghana Health Services Ethics Review Committee headed by the Chairperson Dr. Cynthia Bannerman in accordance with the relevant guidelines and regulations of the Ghana Health Services Ethics Review Committee.

Consent to Participate Statement

Informed Consent to participate was obtained from all participants, and for children under the age of 16, consent was obtained from a parent or legal guardian.

Consent to publish statement

NOT APPLICABLE**.**

Data Availability Statement

The datasets generated and analyzed during the current study on determinants of skilled delivery service utilization in the Ada Foah Subdistrict of the Greater Accra Region Ghana are not publicly available due to privacy and ethical restrictions but are available from the corresponding author on reasonable request.

This wording is standard for manuscripts where sensitive health or demographic data is involved, ensuring transparency while protecting participant confidentiality.

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Figures

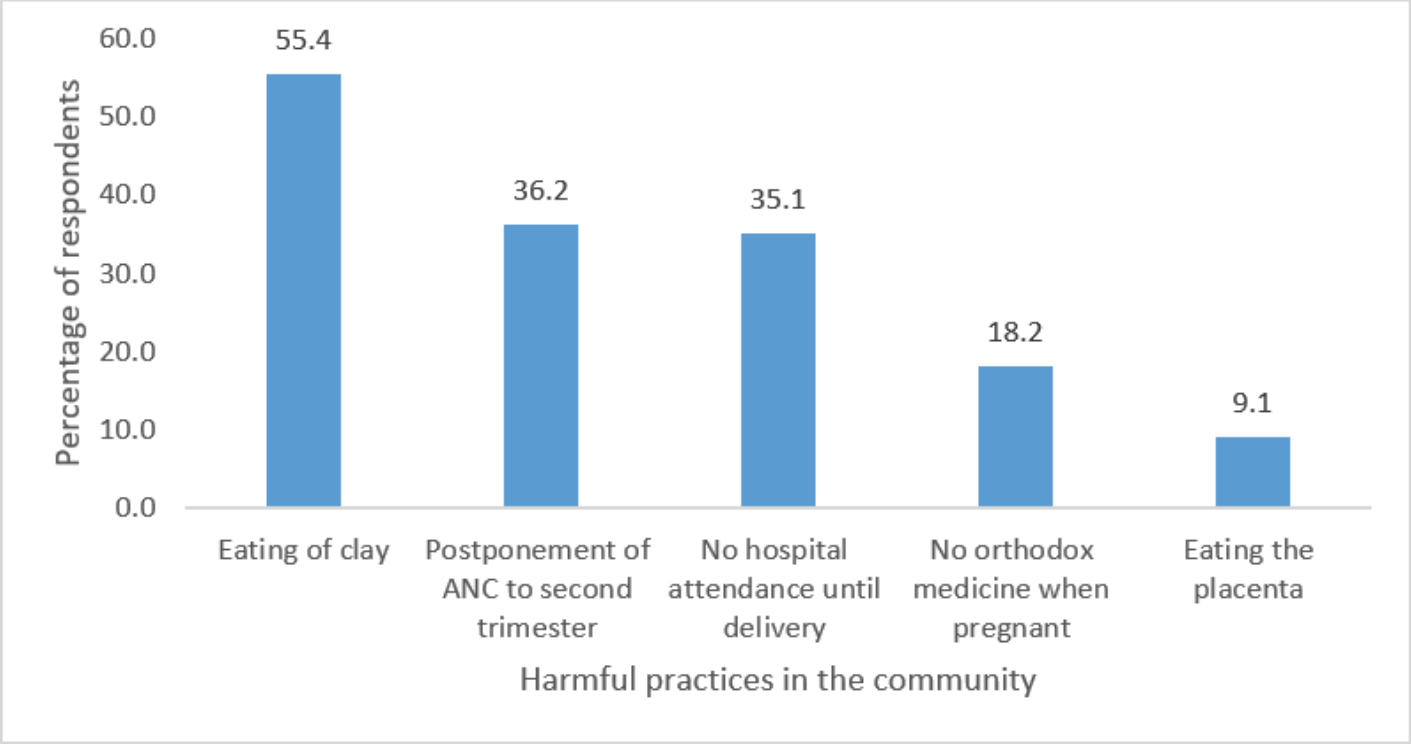


Figure 1

Figure 3: Social cultural practices among pregnant women in the community

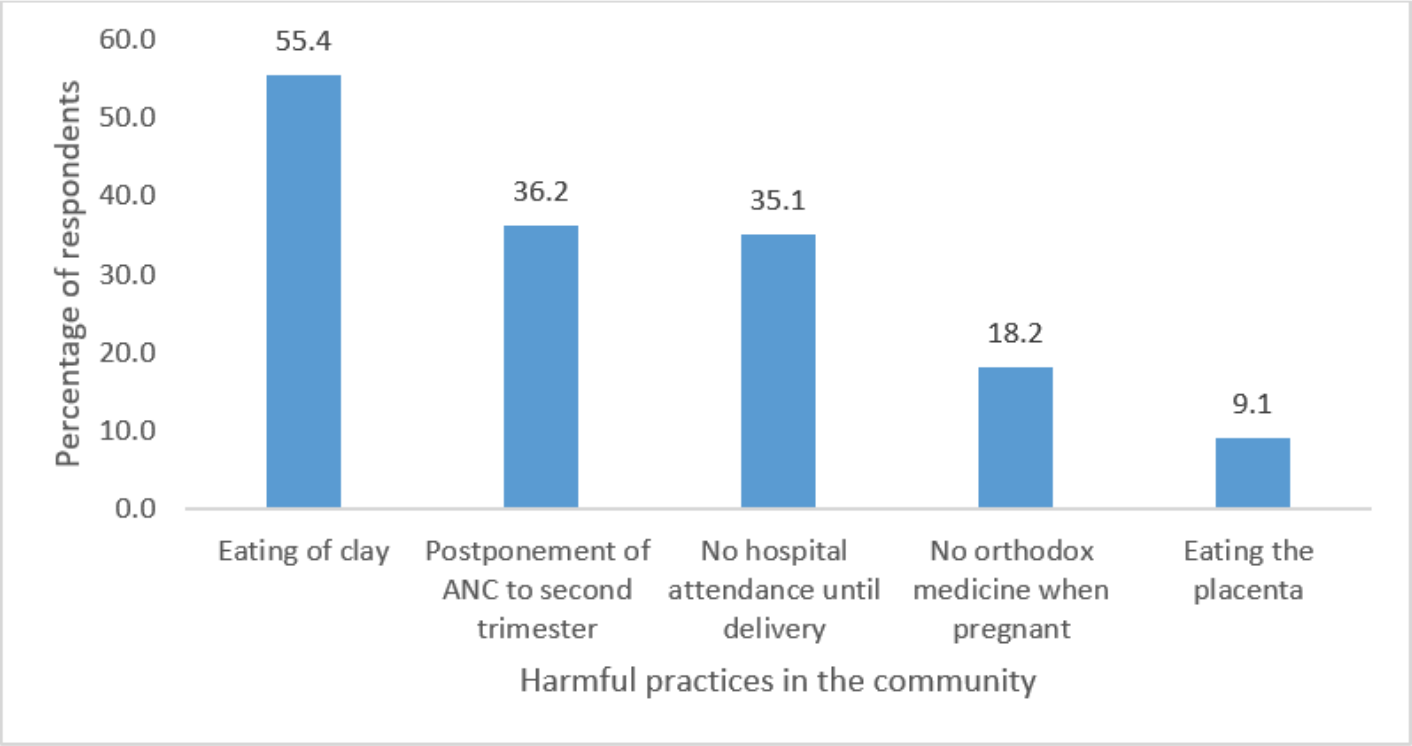


Figure 1

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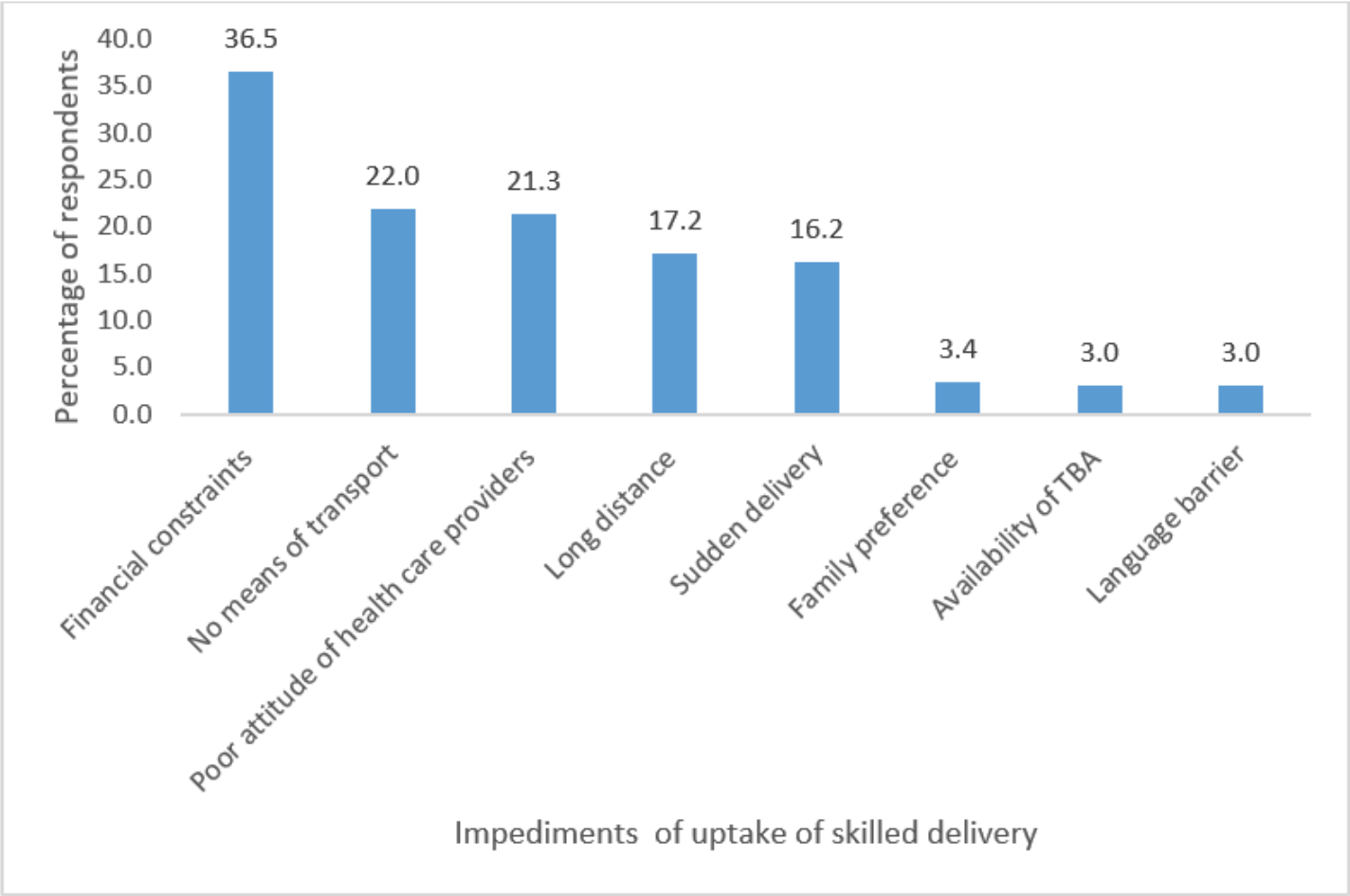


Figure 2

Figure 4: Reasons for low uptake of skilled delivery

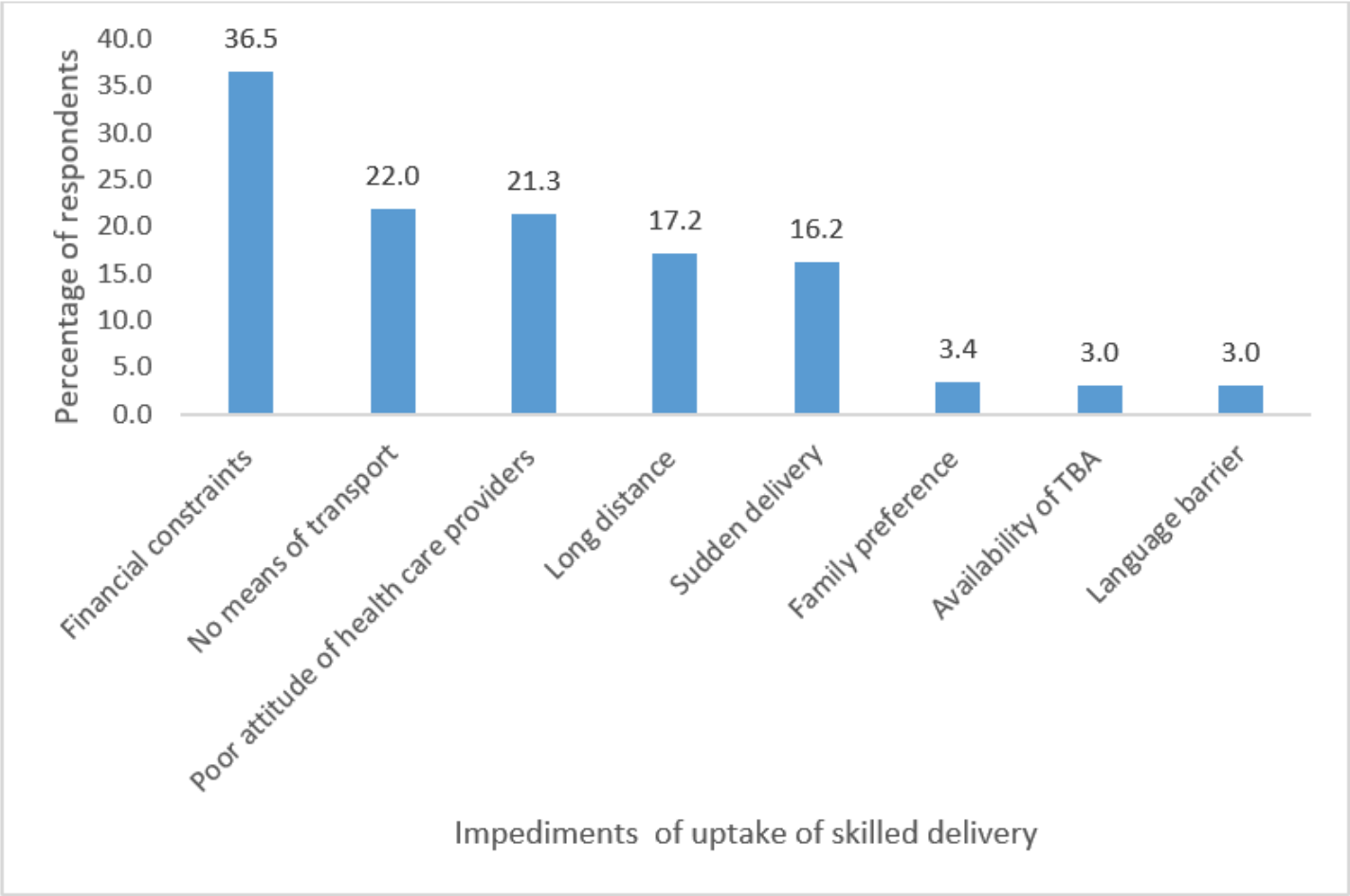


Figure 2

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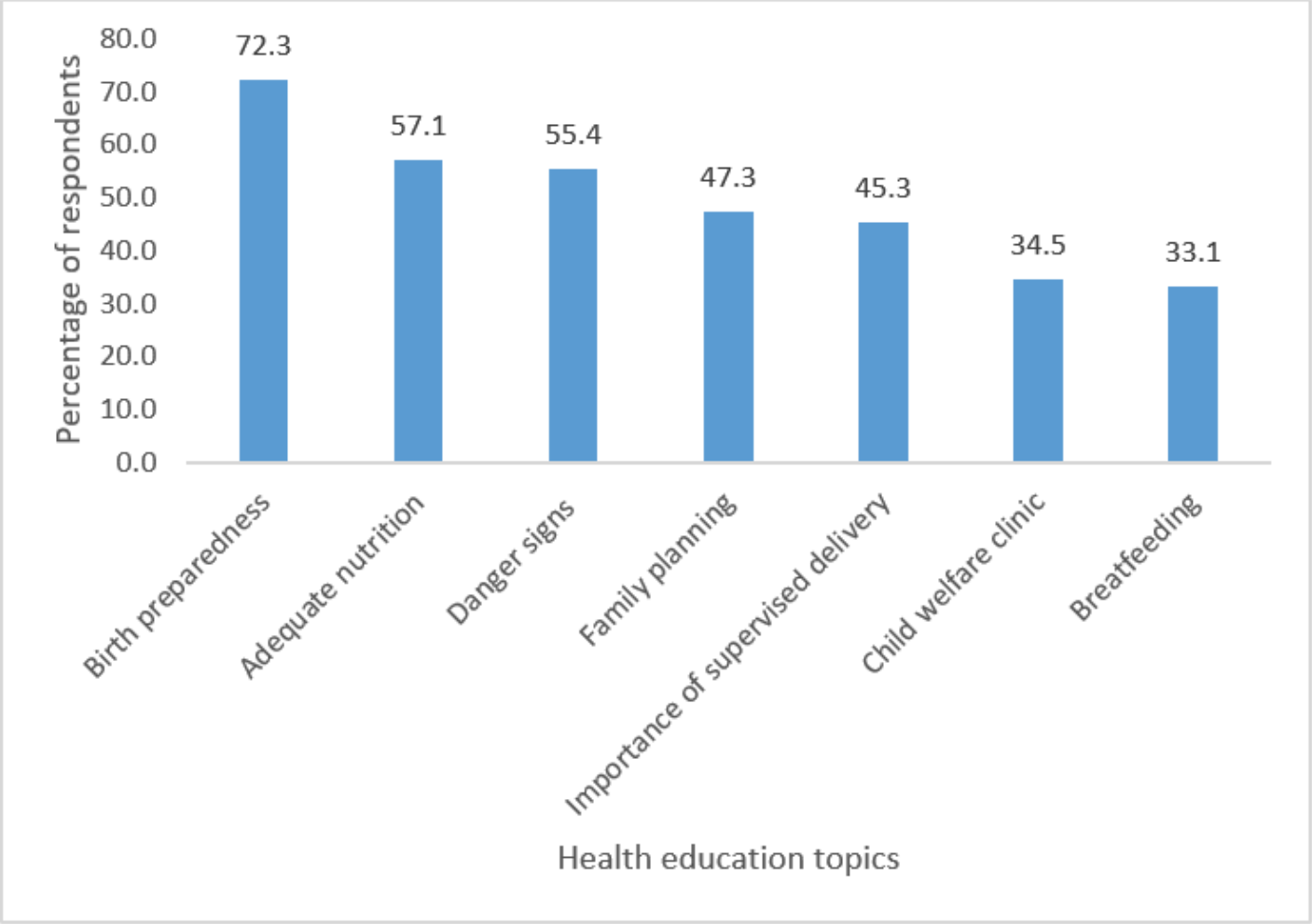


Figure 3

Figure 5: Topics discussed during ANC visits

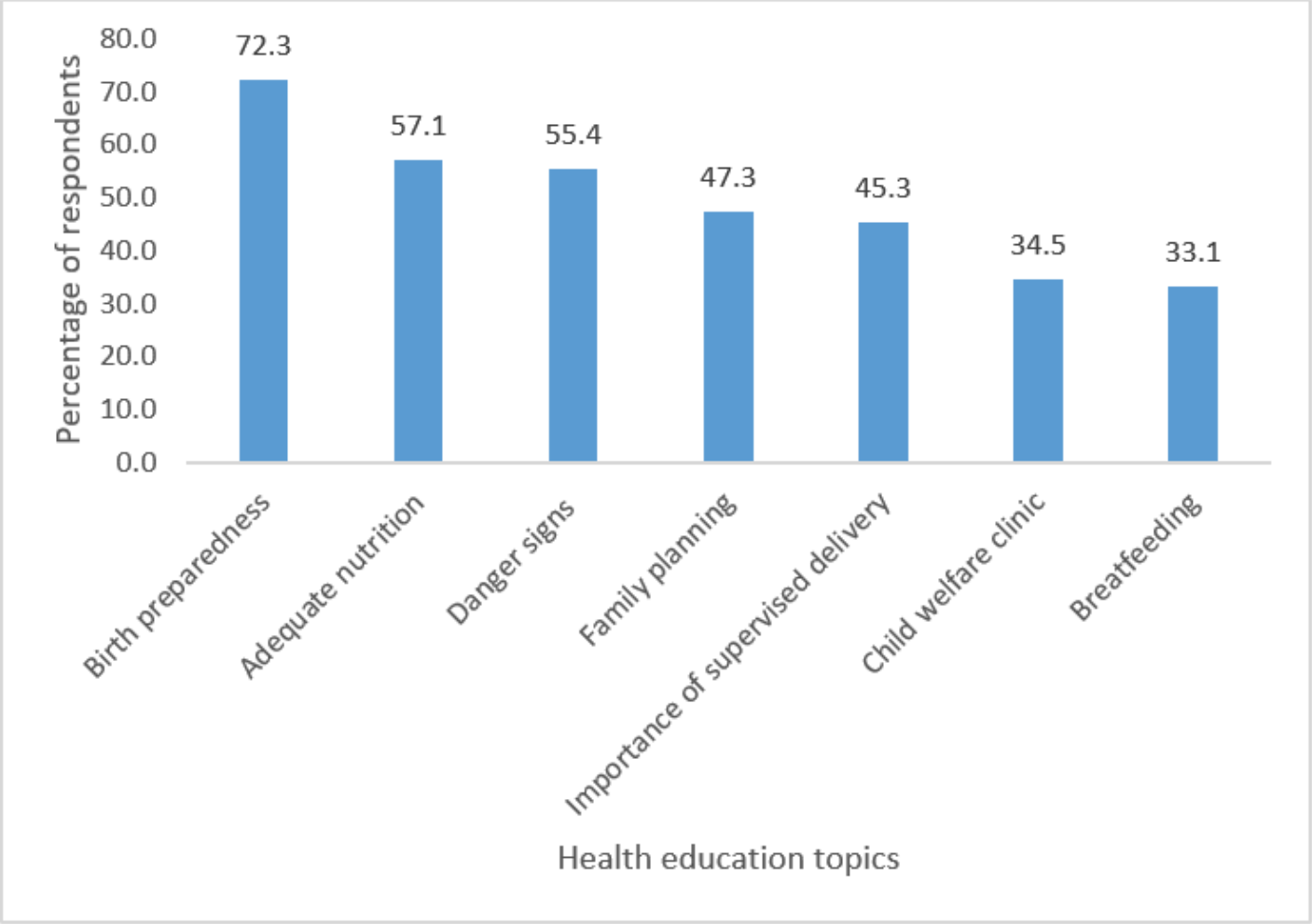


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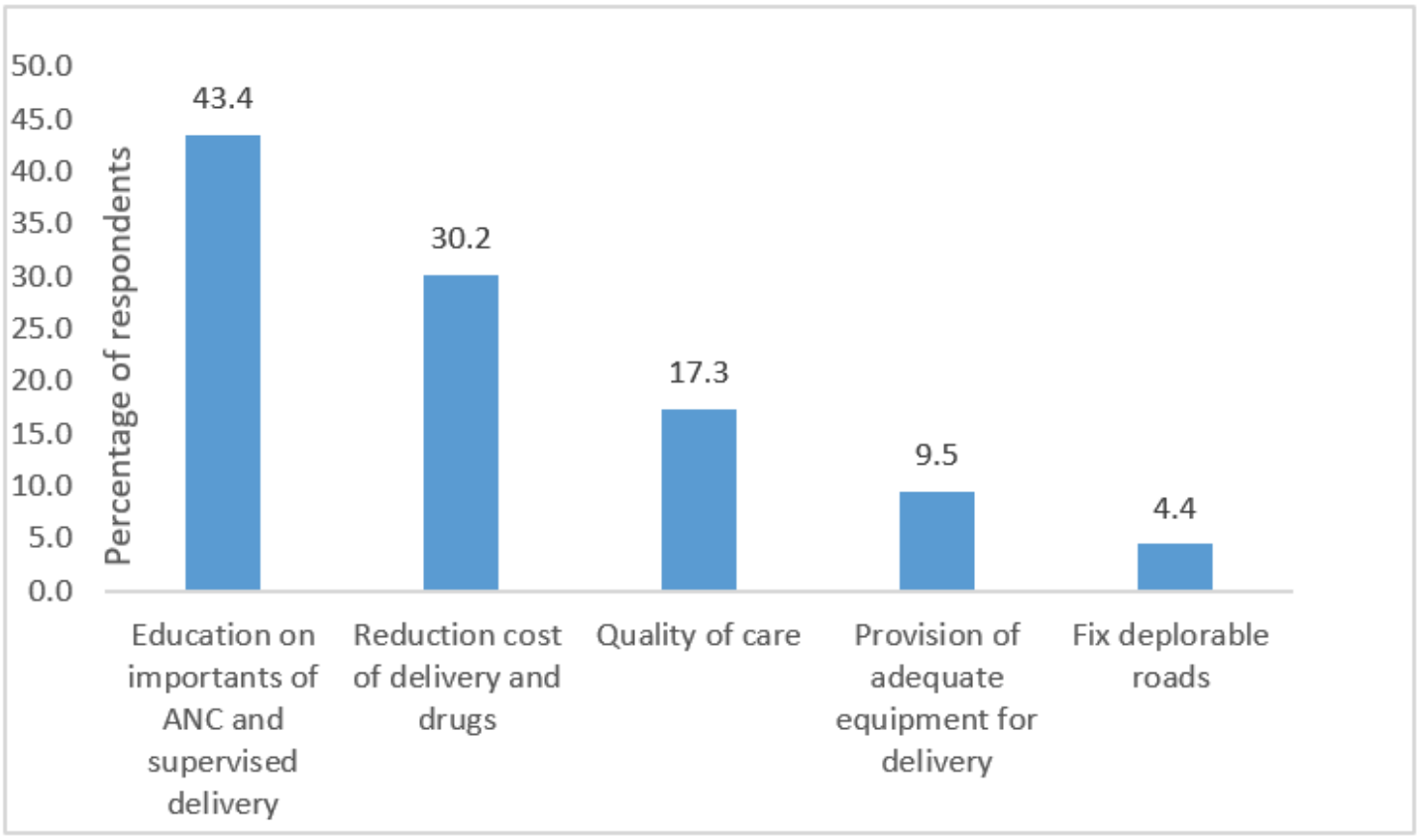


Figure 4

Figure 6: Factors that can boost the uptake of skilled delivery

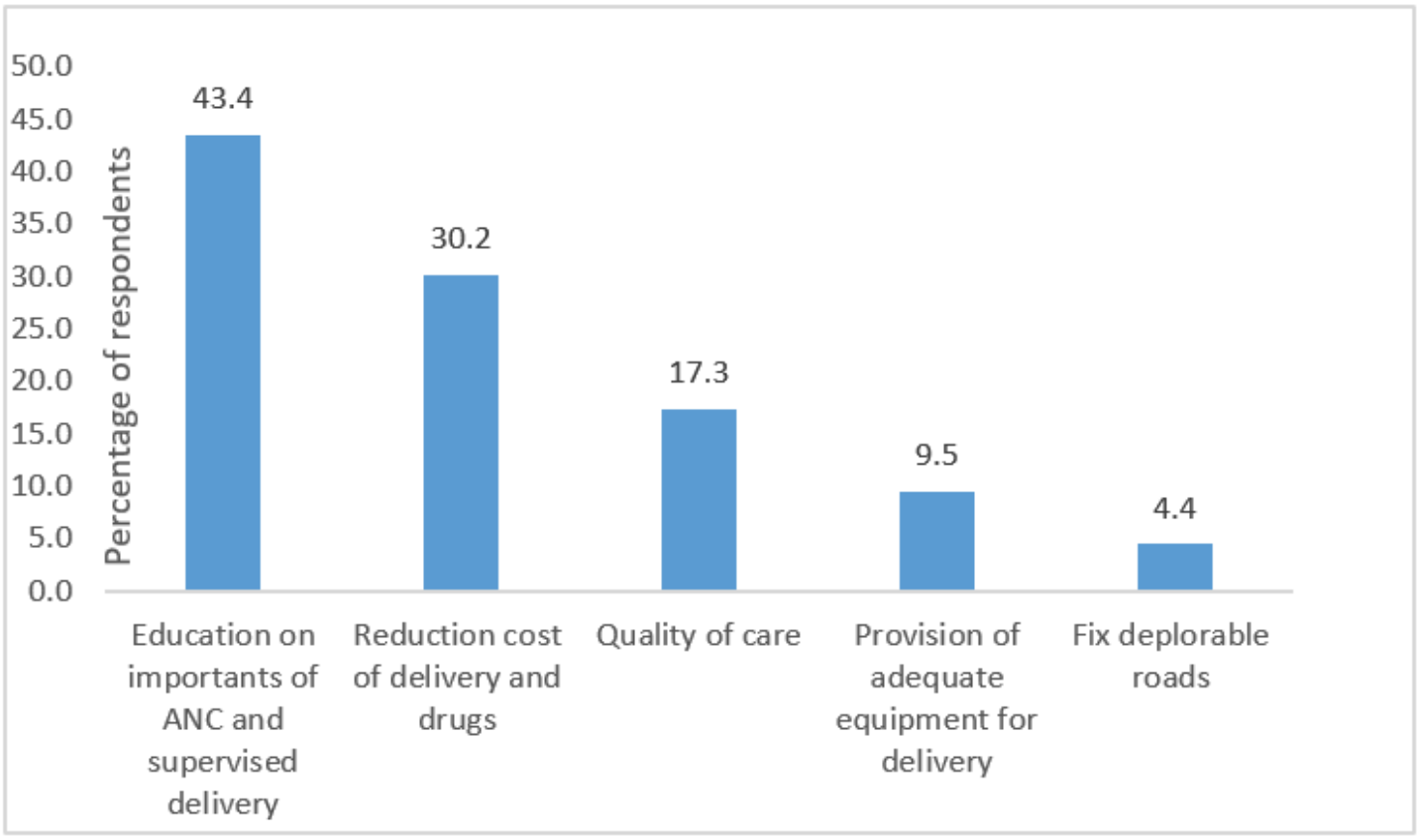


Figure 4

Figure 6: Factors that can boost the uptake of skilled delivery