



## ORIGINAL ARTICLE



# Factors contributing to home deliveries by women attending post-natal care at a selected clinic in Rundu District, Kavango East Region, Namibia

Daniel O. Ashipala<sup>1\*</sup> | Tatenda Mutsindikwa<sup>1</sup>

<sup>1</sup>Department of General Nursing Science, School of Nursing and Public Health, Faculty of Health Sciences, University of Namibia (UNAM), Rundu, Namibia

### Abstract

In 2016, almost 31 million births in low- and middle-income countries occurred without a qualified birth attendant. 90% were in South Asia and sub-Saharan Africa. In sub-Saharan Africa, where Namibia is located, 50% of births are unattended.

This study aimed at identifying factors contributing to home births in Rundu District, Kavango East Region.

This study was quantitative cross-sectional. Postnatal moms who gave birth at home completed a self-administered questionnaire with closed-ended questions. 27.2% of respondents were 33 to 38. Most responders (83.3%) were unmarried and 38.6% were "other" religious. Participants were mostly unemployed (79.8%). 49.1% of respondents were uneducated. 8.8% of employed people were in the public sector, 6.1% in private, and 1.8% self-employed. Most (93.9%) visited antenatal clinics once (25.4%), twice (20.2%), or three times (40%) before delivery. 81% picked where to deliver on their own, and 71% had previously delivered at home. No one explained this behavior. The majority of women in this study had given delivery at home. Education, religion, and delivery location were correlated. These findings inform the community and government about the present trend of home births, which may harm mother and newborn outcomes.

Keywords: Women, home deliveries, postnatal care, factors, Namibia

Copyright : © 2022 The Authors. Published by Publisher. This is an open access article under the CC BY-NC-ND license (<https://creativecommons.org/licenses/by-nc-nd/4.0/>).

## INTRODUCTION

The maternal mortality rate has considerably decreased globally, falling by almost 44% between 1990 and 2015.<sup>1</sup> Utilizing initiatives

like the Safe Motherhood Initiative, which was globally established in 1987, helped to accomplish this significant reduction. Maternal mortality is still too high, as evidenced by the decline's failure to reach MDG target 5A, which called for a 75% reduction in

the rate of maternal mortality throughout the reporting period. As a result, the Sustainable Development Goal 3 (SDG 3) was created, with the objective of bringing down maternal mortality rates worldwide to fewer than 70 per 100,000 live births by the year 2030.<sup>2</sup>

Every day, issues related to pregnancy or childbirth claim the lives of roughly 830 women worldwide. 99% of all maternal deaths in 2015 were thought to have happened in underdeveloped nations. With 535 maternal deaths per 100,000 live births, Sub-Saharan Africa, where Namibia is situated, accounted for 66% of these maternal deaths.<sup>1</sup> A global database shows that in the same year, Namibia's maternal mortality rate decreased from 390 per 100,000 live births in 2005 to 319 per 100,000 live births in 2010, to 265 deaths per 100,000 live births.<sup>3</sup> Although maternal mortality in the nation has decreased, the rate still exceeds the SDG 3 objective of 70 deaths per 100,000 live births.<sup>2</sup>

Over a quarter of maternal deaths (27%) are caused by hemorrhage, which continues to be the top cause of maternal death globally. A similar percentage of deaths (28%) are thought to be indirectly related to pre-existing medical issues, whereas 14% are attributed to hypertensive disorders during pregnancy, particularly eclampsia. Other major reasons include sepsis (11%), direct death, which includes complications from botched abortion (8%) and embolism (3%),<sup>4</sup> as well as AIDS (2%). Direct mortality also includes obstructed labor or anemia (10%).<sup>1</sup> Hemorrhage (37.8% of maternal deaths in Namibia), eclampsia (24.4%), and puerperal sepsis (23.3%) are the three main causes of mother deaths directly.<sup>5</sup>

According to SDG 3, maternal mortality can be decreased by managing, preventing, or even mini-

---

**Supplementary information** The online version of this article ([Figures/Tables](#)) contains supplementary material, which is available to authorized users.

---

**Corresponding Author:** *Daniel O. Ashipala*,  
*Department of General Nursing Science, School of Nursing and Public Health, Faculty of Health Sciences, University of Namibia (UNAM), PO Box 88, Kaisosi Road, Rundu, Namibia.*  
*Email: [dashipala@unam.na](mailto:dashipala@unam.na)*

mizing the effects of all these variables. The location of distribution has a significant impact on the result. Reduced rates of maternal mortality and morbidity need the use of experienced birth attendants and access to obstetric care before to, during, and after delivery. Health care institutions are set up to keep track of pregnant women's and their fetuses' health, unlike homes (blood pressure monitoring and fetal heart rate monitoring, respectively). When things suddenly get out of control, medical facilities are also prepared to provide interventions like cesarean sections and assisted deliveries.<sup>1</sup>

Namibia has put policies in place to encourage the use of medical facilities for delivery. Among these is the Harambe Prosperity Plan, which urges that all efforts be made to avoid this from happening and believes that "one mother who dies during giving birth is one mother too many."<sup>6</sup> The Prosperity Plan employs tactics like hiring midwives and community health workers who are based in the community and ready to help with and supervise safe home deliveries in order to accomplish this. 6 The availability of necessary tools like ultrasound machines, together with the provision of necessary medications and sufficient manpower, are further measures. The proposal also calls for the construction of maternal shelters for expectant mothers so that pregnant women can travel from far-flung rural areas to wait for the arrival of their children at the hospital, lowering both maternal and neonatal mortality.<sup>6</sup>

The Safe Motherhood Initiative, which has been in place since 1987 and aims to lower maternal mortality by educating expectant mothers and their partners about health issues that are common during pregnancy and offering screening for conditions like iron-deficiency anemia, is also strongly supported by Namibia. The initiative coordinates with other programs like the Program for Reduction of Maternal and Child Mortality (PARCMaCM), which aims to speed up the reduction of maternal and child mortality through training of health workers, immunization campaigns, the provision of hospital equipment and supplies, vehicles, and ambulances, as well as the building of maternity waiting homes. In 2013, Namibia initiated this project.<sup>1</sup>

## MATERIALS AND METHODS

### Study design

A quantitative, descriptive, cross-sectional design was used for the current study. This design is relatively inexpensive and can be used for a short period.

### Study site descriptions

Rundu has seven health care facilities, including one public hospital, one private hospital, and five clinics, which serve a population of 85,700. The state hospital serves not only the residents of Rundu, but also those in the surrounding countryside. In addition, there are nine private health consulting facilities in Rundu that do not offer inpatient beds. The town's public hospital has 25 medical doctors, putting the average ratio of doctors to population at 1:5,144, which is substantially below the WHO-recommended ratio of one doctor per 1,000 people for Rundu's economy profile. The lack of medical physicians in Rundu is a nationwide problem that affects the entire healthcare system. In addition, there are seven private physicians serving a population of 17,538 at a ratio of 1:2,500. 79% of Kavango's population lives in rural regions.<sup>7</sup> The region also has the highest percentage of poverty in Namibia, at 53.2%; 64% of the population is considered to be materially deprived, while 50% is employment deprived (unemployed) and 21% of the population is illiterate.<sup>8</sup> The majority of individuals are Catholic Christians. In the region, the crude birth rate is 49 per 1,000 and the crude death rate is 13 per 1,000. The maternal mortality rate is 800 per 100,000 live births, which is significantly higher than the national rate of 400 per 100,000 live births, and the newborn mortality rate is 49 per 1,000 live births. 48.6% of births are attended by trained medical personnel. Women of reproductive age account for 22% of the female population, or 207,627 individuals, while their birth rate is estimated to be 4.4% of the population.

### Study population

The study population comprised post-natal mothers in Rundu (the study area) who had delivered their

babies at home within the six months preceding the study, and who resided in the study area, as well as key informants.

### Inclusion and exclusion criteria

In this study, we included all post-natal mothers visiting Nkarapamwe Clinic who had delivered at home in the six months prior to the study and who were willing to participate in the study. Women attending the postnatal clinic at Nkarapamwe but did not deliver at home and those women who did not consent to participate in the study were excluded.

### Sampling methods

A convenient sampling method was employed, meaning that whoever was available and met the criteria could be part of the sample. This method was used to achieve a greater degree of representativeness. All students recruited into the study signed an informed consent form after the purpose of the study and what their participation entailed had been explained to them.

### Sample size determination

The sample size for the current study was 403. This was determined using the formula below<sup>9</sup> as follows:

$$\text{Sample size} = \frac{N}{1 + N \times a^2}$$

n = sample size

N = total population

A = total confidence limit at 5%, which is 0.05

### Data collection procedure

Data collection was done during September and October 2018, using structured, self-administered questionnaires. To test the feasibility of the data collection instrument, it was pre-tested with six post-natal mothers, who did not form part of the actual study. After the pre-testing, the completion time for the questionnaire was increased in the actual study, to give the respondents enough time to complete it.

### Data analysis

The data collected were entered into the Statistical Package for Social Sciences (SPSS) version 26 for analysis. To ensure the quality of the data entered, double-entry was done to address discrepancies and the data were cleaned before the analysis. All data were analysed using descriptive statistics such as frequencies, means and standard deviation. Multiple logistic regressions were performed and a p-value of less than 0.05 was considered statistically significant at a 95% confidence interval.

### Ethical issues

The research was undertaken after the School of Nursing Ethics and Review Committee (SoN-REC) of the Faculty of Health Sciences, University of Namibia, Namibia (reference number SoN-REC 06/2018) granted approval. The Ministry of Health and Social Services was also contacted for permission to conduct the study (reference number TM/2018). Verbal and written informed consent was obtained from the individuals who participated in the study. This was accomplished after presenting the goal, objectives, advantages, and dangers of the study to the participants. Participation on a voluntary basis was encouraged, and all responders were permitted to withdraw at any time without penalty or loss of privileges. Confidentiality and anonymity were assured. The use of pseudonyms instead of actual names in the study tools provided confidentiality. The protocol for entering the community was followed. After then, all data were gathered, analyzed, and provided in forms that prevented participant identification.

## RESULTS

### Demographic characteristics

The research was conducted at a single clinic in the Rundu District of Kavango East. All 403 post-natal mothers who gave birth at home who were approached agreed to participate in the study; however, only 114 questionnaires were completely filled

out. Consequently, 114 people were included in the analysis. The results revealed that 27.2% of respondents (n=31) were between the ages of 33 and 38. The majority of respondents (83.3%; n=95) were unmarried, but 38.6% listed "other" as their religion (n=44). Approximately half of the respondents (49.1%; n=56) lacked any form of formal schooling. Moreover, the majority (79.8%) of participants (n=91) were unemployed. 8.8% were employed in the public sector (n=10), 6.1% were employed in the private sector (n=7), and 1.8% were self-employed (n=2).

In addition to obstetric history, prenatal history, and sociocultural factors, the researcher had previously identified the elements that contribute to home births. Accordingly, these factors are given and explored.

### Obstetrical records

It was shown that the majority of respondents had given birth to between one and three children (72.8%; n=83) (99.1%; n=113). The majority (85.1%, n=97) had never given birth to a kid who later died. 5.3% (n=6) and 4.4% (n=5) of those who had experienced this loss had lost children between the ages of 0–28 days, 2–6 months, and seven months to one year, respectively. According to 1.8% (n=2) of respondents, the oldest kid lost was between the ages of three and four years. 84.2% (n=96) of respondents conceived their first child between the ages of 15 and 25, whereas 11.4% (n=13) did so between the ages of 26 and 36. Although 3.5% (n=4) were non-respondents, 0.9% (1 response) reported she was between 37 and 47 years old when she had her first child. According to the respondents, health facility employees (32.5%, n=37); traditional health practitioners (21.9%, n=25); friends (21.1%, n=24); and relatives (18.4%, n=21) were the sources of information on pregnancy, whereas 5.3% (n=6) acquired the information from a church/mosque/temple (Table 1).

### Prenatal records

The majority of respondents (93.9%, n=107) attended antenatal clinic (ANC) at least once, twice, or three times, with 25.4% (n=29), 20.2% (n=23), and 40.4% (n=46) attending at least once, twice, or three

times, respectively. The majority of respondents (64%, n=73) were informed of their projected date of delivery. The majority of respondents (75.5%, n=86) initially visited the ANC after 13 weeks of gestation. The majority of respondents (84.2%, n=96) did not seek assistance outside of the health service throughout pregnancy. The bulk of the 12.3% (n=14) who sought assistance elsewhere turned to their family (8.8%, n=10), while 2.6% (n=3) turned to traditional birth attendants (TBA). The respondents who attended ANC got a variety of health interventions, including education on healthy nutrition, rest, and hygiene, Elimination of Mother-to-Child Transmission (EMTCT), tetanus immunization, iron/folate supplementation, and an ANC profile. Rarely received were additional services such as Isoniazid Preventive Therapy (IPT), Long-Lasting Insecticide-Treated Nets (LLITN), deworming, family planning, and infant care. 4.5% (n=5) of respondents reported receiving health education on hygiene and preparation for the baby; oral hygiene and preparation for labor; abdominal massage; olive oil from the church; and traditional medicine at home (Table 2).

### Socio-cultural variables

isplays descriptive statistics regarding the sociocultural elements influencing home deliveries among respondents. Results indicated that 85.1% (n=91) of women made their own decision regarding where to deliver, and 71.1% (n=81) had previously delivered a child at home; however, none of the respondents provided an explanation for this behavior. The majority of respondents (77.2%, n=88) concurred that the health facility employees were positive, but 13.2% (n=15) were unsure. More than half of the women (51.8%, n=59) gave birth without their partner or significant other present. This advantage was only enjoyed by 43.9% of respondents (n=50) (Table 3).

### Women's awareness of the dangers of home deliveries

In order to determine the level of women's understanding regarding the dangers of home births, a binary logistic regression was conducted. This inferential statistic was used to determine which variables

significantly affected home deliveries. Table 4 shows that the majority of participants (71,1%) delivered at least one of their children at home (Table 4).

### Logistic regression analysis

To assess the factors impacting home delivery, a binary logistic regression model using a forward method was employed. Because the home delivery variable has two categorical outcomes (Yes/No), this model was utilized. Table 5 reveals that religion, greatest educational qualification, and who determined where to deliver were the only factors maintained in the model, as the other variables were not significant at the 95% confidence level (Table 5).

## DISCUSSION

Similar conclusions were reached to those of Jama et al.<sup>10</sup> Their research revealed that 41% of respondents had at least one home birth. In their study, respondents had a mean age of 32.98.1 years; those with 7–9 children were nearly 2.5 times more likely to have a home delivery (OR=2.38, p=0.056). As a result of home delivery, the study discovered that 22% of the mothers stated that their infant had been sent to a nursery or newborn baby health center for care. 41 (73,2%) of these mothers indicated that their child died within 28 days of delivery, while 24 (42,8%) reported lengthy labor with their last delivery at home.<sup>10</sup> In another study conducted in Ethiopia, 53.7% of the 447 respondents were younger than 20 years old at the time of their first pregnancy.<sup>11</sup>

Prior to delivery, the World Health Organization (WHO) recommends a targeted ANC visit or at least four ANC checkups for pregnant women. A study conducted in Ethiopia revealed that 197 participants (20.6%) attended an ANC at least four times. The majority of research participants (75.9%) favored a health clinic with a qualified provider over a hospital.<sup>12</sup> The majority of respondents in this survey had attended an ANC at least once, twice, or three times. In a different study by Bedilu and Niguse,<sup>11</sup> 337 (75.6%) of 447 respondents had attended an ANC, with 218 (64.7% indicating four or more visits), 175 (52%) having begun visiting an ANC

during the second trimester, and 216 (63.8%) having attended at a health post. 182 (40.72%) of all study participants had a history of two to four pregnancies, while 104 (76.7%) had had pregnancy complications during their most recent pregnancy. Twenty-four percent (24.5%) of the 302 moms who gave birth at home during their most recent pregnancy were aided by TBAs.<sup>1</sup> In the present study, four respondents (28.6%) were aided by TBAs.

Sialubanje et al.<sup>13</sup> stated that women were unable to deliver at health facilities due to their lack of decision-making autonomy regarding childbirth, their reliance on their husbands and other family members for the final decision, and a variety of physical and socioeconomic barriers, including long distances to health facilities, a lack of money for transportation, and an unwillingness to leave their homes. This study indicated that the mother made her own decision on the location of the birth. Another finding of Sialubanje et al.<sup>13</sup> that was not supported by the present investigation was that the majority of women in Zambia gave birth at home due to socio-cultural norms surrounding childbirth and a negative perception of the quality of care provided at facilities. In contrast, the majority of these women viewed TBAs favorably, seeing them to be kind, skilled, friendly, trustworthy, and available when needed.<sup>13</sup> The majority of respondents in this research (77.2%) had a favorable opinion of health facility staff, however they did not specify why they preferred to give birth at home. In accordance, Jama et al.<sup>10</sup> discovered that 141 (61.8%) women made their own decision regarding where they delivered their kid, 50 (22.0%) claimed that their husbands made the decision, and 37 (16%) reported that their mother made the decision. These findings were consistent with those of the Namibia Demographic Health Survey (NDHSS) (2015).

Fourteen respondents in this study said that they were not permitted by their husbands or families to visit a facility because they did not trust it or believed it provided subpar services. This study acknowledges that such thinking is related to the decision-level maker's of education and the location of delivery. Bedilu and Niguse<sup>11</sup> also discovered a correlation between the educational level of the moms and home

birth. As part of their study aims, Jama et al.<sup>10</sup> identified potential factors related with home delivery using a chi-squared test. There was a significant association between home delivery among women and parity ( $X_2=13.66$ ,  $p=0.003$ ), women's level of education ( $X_2=11.06$ ,  $p=0.001$ ), the women's occupation ( $X_2=9.56$ ,  $p=0.002$ ) and marital status ( $X_2=9.56$ ,  $p=0.031$ ), as well as the person who makes the decision about where to deliver ( $X_2=34.05$ ,  $p=0.001$ ).

Jama et al.<sup>10</sup> found that women with 4–6 children were three times more likely to deliver at home than those with 1–3 children (OR=3.32,  $p=0.001$ ); those with 7–9 children were approximately 2.7 times more likely to have had a home delivery than those with 1–3 children (OR=2.69,  $p=0.010$ ); and women with 10 or more children were 1.7 times more likely to have had a home delivery than those with 1–3 children (OR=1.7). These findings are consistent with those of Yebyo et al.<sup>15</sup>

## CONCLUSIONS

In the Kavango region, where 79% of the population lives in rural areas, this study was done. Furthermore, the Kavango Region has the highest poverty rate in Namibia at 53.2%. 64 percent of the population is economically poor, 50 percent is unemployed, and 21 percent of the Kavango population is illiterate. The outcomes of this study will only apply to communities with similar characteristics, such as resource-poor rural areas with high illiteracy rates.

The majority of respondents have between one and three children, according to the research. The women had given birth to infants who died between 0 and 28 days of age between 7 months and 1 year. The first conception occurred between the ages of 15 and 36 years old. Few people obtained information about pregnancy from a church/mosque/temple. Employees of health care facilities, traditional health practitioners, and friends and family provided information regarding pregnancy. There was a high rate of ANC attendance between one and three times, and the majority of women were informed of their anticipated due date after 13 weeks of gestation. During pregnancy, the health clinic offered treatments including health education on food, rest, and hygiene, EMTCT,

tetanus vaccination, and iron/folic acid supplements. The majority of women have previously given birth at home, according to the findings. The consensus was that the medical center's personnel were helpful. However, more than half of all births occur without a partner or significant other present. There was a significant association between the mother's level of education, religion, choice of birth site, and home delivery methods. Therefore, mothers with a certain degree of education were less likely to deliver their babies at home. This shows that women who decide where to give birth are less likely to do it at home.

## INFORMATION

**Acknowledgements.** The authors wish to thank the research participants who took part in this research endeavour. Without their participation this study would not have been possible. We also wish to thank the University of Namibia ethics review committee and the Ministry of Health and Social Services research unit for granting us permission to conduct this study.

**Authors' contributions.** DOA and TM conceived the research idea, wrote the protocol and carried out the data collection. DOA and TM performed the data analysis and wrote the manuscript. DOA critically edited the final manuscript. Both authors approved the final version for publication.

**Conflict of interest.** The authors declare no potential conflict of interest.

**Funding.** None.

**Availability of data and materials.** All data generated or analyzed during this study are included in this published article.

**Informed consent.** The research was conducted with informed consent after receiving approval from the School of Nursing Ethics and Review Committee (SoNREC) of the Faculty of Health Sciences, University of Namibia, Namibia (reference number: SoNREC 06/2018). The Ministry of Health and Social Services was also contacted for permission to conduct the study (reference number TM/2018). Verbal and written informed consent was obtained from the respondents who participated in the study. This was accomplished after explaining the purpose, objectives, benefits, and risks of the study to the participants. Participation on a voluntary basis was encouraged, and all respondents were permitted to withdraw at any time without penalty or loss of privileges. Confidentiality and anonymity were assured. The use of pseudonyms instead of actual names in the research tools ensured confidentiality. The protocol for entering the community was followed. After that, all data were gathered, analyzed, and reported in formats that prevented participant identification.

**TABLE 1:** Respondents' obstetric history.

	Frequency	%
<b>Have you ever given birth?</b>		
Yes	113	99.1
No	1	0.9
<b>Number of children</b>		
One	25	21.9
Two	26	22.8
Three	32	28.1
Four	15	13.2
Five	10	8.8
Six	3	2.6
Seven	1	0.9
Eight	1	0.9
Nine	1	0.9
<b>Have you ever given birth to a child who was alive then passed on?</b>		
Yes	17	14.9
No	97	85.1
<b>If yes, at what age did the child die?</b>		
0–28 days	5	4.4
2–6 months	6	5.3
7 months – 1 year	5	4.4
1–2 years	1	0.9
3–4 years	2	1.8
Non-respondents	95	83.3
<b>At what age did you conceive your first child?</b>		
15–25	96	84.2
26–36	13	11.4
37–47	1	0.9
Non-respondents	4	3.5
<b>Where have you heard of any information about pregnancy?</b>		
Traditional health practitioners	25	21.9
Relatives	21	18.4
Friends	24	21.1
Health facility personnel	37	32.5
Church/mosque/temple	6	5.3
Non respondents	1	0.9
<b>Total</b>	<b>114</b>	<b>100.0</b>



**TABLE 2:** Respondents' antenatal history.

<b>Did you attend ANC during pregnancy?</b>		
Yes	107	93.9
No	7	6.1
<b>If yes, how many times?</b>		
None	1	0.9
Once	29	25.4
Twice	23	20.2
Thrice	46	40.4
Non-respondents	15	13.2
<b>At what gestation period did you start attending ANC?</b>		
≤ 12 weeks	18	15.8
13–24 weeks	46	40.4
> 24 weeks	40	35.1
Non-respondents	10	8.8
<b>Were you informed about your EDD?</b>		
Yes	73	64.0
No	28	24.6
Non-respondents	13	11.4
<b>Did you seek help elsewhere other than health centre during pregnancy?</b>		
Yes	14	12.3
No	96	84.2
Non-respondents	4	3.5
<b>If yes in previous question, please indicate</b>		
TBA	3	2.6
TBA and traditional healer	1	0.9
Relative	10	8.8
Others	1	0.9
Non-respondent	99	86.8
<b>What services did you receive?</b>		
Non-respondents	4	3.5
Combination of healthy nutrition, EMTCT, TT, iron/folate supplementation; rest and hygiene, and ANC profile. Other services such as IPT, LLITN, deworming, family planning, newborn care was rear.		
<b>If you ever received help other than at the health facilities during pregnancy, state the services rendered</b>		
Health education on hygiene & preparation for baby	1	0.9
Health education, oral & preparation for labour	1	0.9
Massage the abdomen	1	0.9
Olive oil from church	1	0.9
Traditional medicine at home	1	0.9
Non-respondents	109	95.5
<b>Total</b>	<b>114</b>	<b>100.0</b>

**TABLE 3:** Respondents' socio-cultural factors.

	Frequency	%
<b><i>Who decided where to deliver?</i></b>		
Self	97	85.1
Husband	2	1.8
Others	10	8.8
Non-respondents	5	4.4
<b><i>Have you delivered any of your children at home?</i></b>		
Yes	81	71.1
No	33	28.9
<b><i>If your response to the previous question was yes, please indicate why?</i></b>		
Non-respondents	114	100
<b><i>Is your perception towards health facility staff positive?</i></b>		
Strongly agree	39	34.2
Agree	49	43.0
Uncertain	15	13.2
Disagree	2	1.8
Non-respondents	9	7.9
<b><i>Did you have your partner or significant others present during delivery?</i></b>		
Yes	50	43.9
No	59	51.8
Non-respondents	5	4.4
<b><i>Suggest ways of improving home deliveries</i></b>		
Non-respondents	79	69.3
Refer to appendix A	35	30.7
<b>Total</b>	<b>114</b>	<b>100.0</b>

**TABLE 4:** Home deliveries.

**Have you delivered any of your children at home?**

	Frequency	Percentage
<b>Yes</b>	81	71.1
<b>No</b>	33	2
<b>Total</b>	114	100.0

	B	S.E.	Wald	df	Sig.	Exp(B)
<b>Religion (Protestant)</b>			20.577	5	.001	
Adventist	-.829	1.557	.284	1	.594	.436
Catholic	3.415	.993	11.818	1	.001	30.419
Evangelican	-18.385	27.456.248	.000	1	.999	.000
Muslim	3.113	.789	15.583	1	.000	22.489
Others	1.235	.868	2.022	1	.155	3.437
<b>Highest Educational qualification (None)</b>			6.610	6	.358	
School certificate	-26.353	40.192.970	.000	1	.999	.000
Post school certificate	-2.504	1.610	2.417	1	.120	.082
Diploma	-1.027	1.556	.435	1	.509	.358
Bachelors degree	-23.081	40.192.970	.000	1	1.000	.000
Honours Degree	-1.832	1.953	.881	1	.348	.160
Masters	-21.203	40.192.970	.000	1	1.000	.000
<b>Who decided where to deliver? (Self)</b>			11.605	3	.009	
Husband	.084	1.838	.002	1	.963	1.088
Mother in law	-3.272	1.009	10.518	1	.001	.038
Others	-24.152	28.420.722	.000	1	.999	.000
<b>Constant</b>	2.037	1.807	1.271	1	.260	7.670

**FIGURE 1:** Binary Logistic Regression.

REFERENCES

1. WHO. Maternal and reproductive health. 2016; Available from: <https://bit.ly/3RAP2zn>.
2. WHO. Ensure healthy lives and promote health for all at all times; 2017. Available from: <https://bit.ly/2KupAJ0>.
3. Maternal mortality in 1990-2015, Namibia. WHO. 2015; Available from: <https://bit.ly/3wRFt78>.
4. UNICEF. Despite accelerated recent progress, millions of births occur annually without any assistance from a skilled attendant at birth; 2017. Available from: <https://bit.ly/3CQVM7W>.
5. N L. Causes and Risk Factors of Maternal Deaths in Namibia; 2014. Available from: <https://bit.ly/3CWm3lh>.
6. Namibia GO. Harambe Prosperity Plan; 2016. Available from: <https://bit.ly/3RzwlvB>.
7. Population and Housing Main Report. Namibia Statistics Agency. 2011; Available from: <https://bit.ly/3RzphPY>.
8. Economist N. Economy profile for Rundu. 2015; Available from: <https://bit.ly/3wNTPpa>.
9. Sekaran U, Bougie R. Research Methods for Business: A Skill-building Approach. 2013;.
10. Jama AA, Arowojolu AO, Ajayi IO. Factors Influencing Obstetric Home Delivery and Outcome among Women of Reproductive Age in Dismareb District. 2020; Available from: <https://bit.ly/3CTGHCD>.
11. Bedilu K, Niguse M. Delivery at home and associated factors among women in childbearing age, who gave birth in the preceding two years in Zala Woreda, southern Ethiopia. J Public Health Epidemiol. 2017;9(6):177–188. Available from: <https://bit.ly/3D9idFN>.
12. Arba MA, Darebo TD, Koyira MM. Institutional delivery service utilization among women from rural districts of Wolaita and Dawro zones, southern Ethiopia: A community based cross-sectional study. PLoS ONE. 2016;11(3).
13. Sialubanje C, Massar K, Hamer DH, Ruitter R. Reasons for home delivery and use of traditional birth attendants in rural Zambia: A qualitative study. BMC Pregnancy Childbirth. 2015;15:216–216.
14. Ministry of Health and Social Services. Namibia Demographic and Health Survey. Windhoek, Namibia; 2014.
15. Yebyo H, Alemayehu M, Kahsay A. Why do women deliver at home? Multilevel modeling of Ethiopian national demographic and health survey data. PLoS ONE. 2015;10(4).

**How to cite this article:** Ashipala D.O., Mutsindikwa T. **Factors contributing to home deliveries by women attending post-natal care at a selected clinic in Rundu District, Kavango East Region, Namibia.** Journal of Public Health in Africa. 2022;13:2070. <https://doi.org/10.4081/jphia.2022.2070>