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Achieving effectiveness of antenatal outcomes: A qualitative study in Mutasa district, Zimbabwe

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Abstract

Achieving the effectiveness of antenatal outcomes depends on the utilization of antenatal care services. The purpose of the study was to explore the utilization of antenatal care in Mutasa District, Zimbabwe. A qualitative research approach using explorative and descriptive design was utilized. Purposive and snowball sampling techniques were used to sample pregnant women and women whose children were under the age of one year. In-depth interviews were conducted using the Shona language. Data were analyzed using thematic content analysis where themes and sub-themes emerged; namely; factors influencing the perceptions of women on antenatal care services uptake. We certify that all applicable institutional and governmental regulations concerning the ethical use of human volunteers were followed during this research. Multiple obstacles to adherence were identified, including a low level of education, low socio-demographic factors such as age, low income, distance traveled to the clinic, high parity, and acceptability of antenatal care by rural women. Awareness should be made by the Zimbabwean Ministry of Health and Child Care through better education of the target groups such as young mothers, people from low socio-economic groups, and childbearing women for better utilization. *(Afr J Reprod Health 2022; 26[3]: 29-36).*

Keywords: Antenatal care, maternal mortality rate, pregnant women, utilization

Résumé

Résumé

L'efficacité des résultats prénatals dépend de l'utilisation des services de soins prénatals. Le but de l'étude était d'explorer l'utilisation des soins prénatals dans le district de Mutasa, au Zimbabwe. Une approche de recherche qualitative utilisant une conception exploratoire et descriptive a été utilisée. Des techniques d'échantillonnage raisonné et en boule de neige ont été utilisées pour échantillonner les femmes enceintes et les femmes dont les enfants étaient âgés de moins d'un an. Des entretiens approfondis ont été menés en utilisant la langue Shona. Les données ont été analysées à l'aide d'une analyse de contenu thématique où les thèmes et sous-thèmes ont émergé ; à savoir; facteurs influençant les perceptions des femmes sur l'utilisation des services de soins prénatals. Nous certifions que toutes les réglementations institutionnelles et gouvernementales applicables concernant l'utilisation éthique des volontaires humains ont été suivies au cours de cette recherche. De multiples obstacles à l'observance ont été identifiés, notamment un faible niveau d'éducation, de faibles facteurs sociodémographiques tels que l'âge, le faible revenu, la distance parcourue jusqu'à la clinique, une parité élevée et l'acceptabilité des soins prénatals par les femmes rurales. La sensibilisation devrait être faite par le ministère zimbabwéen de la santé et de la garde d'enfants grâce à une meilleure éducation des groupes cibles tels que les jeunes mères, les personnes issues de groupes socio-économiques défavorisés et les femmes en âge de procréer pour une meilleure utilisation. *(Afr J Reprod Health 2022; 26[3]: 29-36).*

Mots-clés: Soins prénatals, taux de mortalité maternelle, femmes enceintes, Utilisation

Introduction

Consistent access and utilization of antenatal care services have been proven to reduce maternal mortality and morbidity[1]. Maternal mortality and morbidity continue to be a significant problem in low-income countries, despite a worldwide focus on the need to improve maternal health. An estimated ninety-nine percent of all maternal deaths occur in developing countries with more than half occurring in Sub-Saharan Africa[2].

Developing countries continue to face a vast burden of maternal and child mortalities where almost 800 girls and women died as a result of

pregnancy and childbirth-related complications, in Sub-Saharan Africa (SSA)[3]. Maternal mortality ratio (MMR) is an important indicator of women's 'health, for both mortality and morbidity. It further denotes the risk related to each pregnancy and child birth[2,4]. Zimbabwe has successfully reduced the maternal mortality ratio from 610 death per 100 000 live birth in 2014 to 443 in 2015[5.] This was due to the intervention of the government's intervention in introducing the waiting mother's homes in rural areas. However, in 2016 the maternal mortality had increased from 443 to 570 per 100 000 live birth[5]. Similar findings were reported in an Indian study by Das *et al*[4] who indicated 60% of poor antenatal care services. Even though the data sources use different methodologies, the fact remains that there has been a general increase in MMR over the years in Zimbabwe[6].

As per the Zimbabwe health survey, 4 to 6 visits per pregnancy are recommended (Ministry of Health Zimbabwe[7.] Pregnant women are urged to initiate antenatal care within the first 3 months of pregnancy[8]. A comprehensive ANC includes four antenatal visits occurring between 8 and 12 weeks of gestation, followed by 24 to 26 weeks and then at 32, and lastly between 36 and 38 weeks. It includes physical, abdominal examination, laboratory investigations, ultrasound of the pregnant women and the protection against anemia, tetanus, and together with giving prenatal advice; two doses of tetanus toxoid injections and consumption of one hundred Iron and Folic acid tablets as recommended by[2] on ANC basic model. Furthermore, the country's economic state has affected the provision of maternal services in health care centers. Shortages of equipment, drugs, and skilled health workers have affected the health of the country at large, affecting mostly the pregnant women in the rural areas[9]. Also, the UN further confirmed that a rate of above 500 per 100 000 is a very high number for mortality and Zimbabwe is still far from reaching the target of under 71 deaths per 100 000, as recommended in the Sustainable Development Goals[9].

Makate and Makate[10] reported that most pregnant women still initiate prenatal care well after the first three months and then have insufficient and low-quality prenatal care. The ability to provide quality prenatal care services in Zimbabwe is often lacking due to serious shortages in skilled health providers, senior medical staff, functioning laboratory equipment, financial resources for health care delivery, and the availability of necessary health drugs. Weight and height checking; blood pressure checking, HIV testing, and blood group tests and treatment for tetanus, malaria, syphilis, and Tuberculosis if a pregnant woman is found to be infected with the diseases, all these should be done during the first trimester of pregnancy perinatal visit[8].

In most rural areas women only make one visit to the clinic for antenatal care, just to get the card, and during labor to utilize the waiting mothers' shelter[11]. Furthermore, pregnant women do not pay for any services rendered to them during the antenatal visit and when giving birth at government clinics[11]. Despite the effort by the Zimbabwean government of introducing the use of waiting for mother's homes, the uptake of antenatal care services is low especially in rural areas. Therefore, the study aimed to explore factors associated with the utilization of antenatal care among women in rural health care facilities in Mutasa district, Zimbabwe.

Methods

A qualitative, explorative, descriptive research design was used. The population comprises all pregnant women and childbearing mothers with children under 1 year of age. The study was conducted at Sakupwanya and Mutasa clinics residential catchment area in Mutasa district which has 43 health facilities offering health care services. The area is hot and endemic to malaria, giving the reason for antenatal care utilization, to prevent malaria in pregnancies. Most of its primary health care clinics are situated more than 5 km from their households. So pregnant women walk for long distances to reach health care. The district constitutes part of the highest maternal and infant mortality rates in the province[12].

A non-probability, purposive sampling was used to sample 15 to 20 participants who were not utilizing antenatal care services. Sampling was continued until data saturation was reached. Their ages ranged between 20 years to 50 years. Participants were interviewed in their homes where they felt comfortable and safe. The researchers used

in-depth interviews to get more information. The participants were interviewed in their native language, which was Shona. The interviews lasted for 45 to 60 minutes. The central question asked was *Can you explain in your own words how you use antenatal care services from the primary health care facility?* Probing questions were asked to allow for deeper and more thoughtful responses from the participants. Field notes were used to record the non-verbal cues that were observed during the interviews. An audio tape recorder was used to record the interviews. Data saturation was reached at participant number eleven. Data were later transcribed verbatim for analysis purposes.

Data analysis

Tesch's open coding qualitative data analysis method was used. The eight integrated steps of the data analysis method adhered to Creswell[13]. The written transcript and ideas that came out were all read by the researcher. A list of all topics and similar topics were grouped and arranged into major and unique topics. The generated list was compared with the original data. Abbreviation of topics as codes was made and codes were written next to the segment appropriate to the text. See Table 1. for the summary of themes and sub-themes.

Trustworthiness

The criteria for ensuring trustworthiness were observed. Credibility was ensured by prolonged engagements with the participants, spending time, and being orientated to the area of study before conducting the interviews. The scheduled visits enabled the participants to become familiar with the participants during the interaction and the interviews. This ensured building a trusting relationship with the participants. The researchers had contact with the participants, during the appointment-making session and data collection. Field notes were taken during the interviews to record findings hence providing a suitable record and the use of a voice recorder. Transferability was ensured by a thick description of the research methodology. Member checking was also conducted by engaging the participants after the interview to confirm the responses provided during the interview, to validate the truth, and confirm the results. Confirmability was dealt with by contacting two participants to represent other patients in confirming whether themes accurately captured what participants' had said. Dependability was achieved by asking two independent researchers to review the transcripts and develop themes. The themes were compared and differences were discussed until a consensus was reached.

Results

Socio- demographic profile of participants

All participants ages ranged from 20 years and above, with the oldest being 50 years old. The participants were mainly female with more than four children. All participants were married. Concerning employment, only two participants were employed. Most participants stayed more than 5 km from the health facilities where antenatal care services are provided. The themes and sub-themes are presented (Table 1).

Sub-theme 1. 1: Knowledge concerning lack of understanding on the importance of antenatal care visits

Pregnant women in rural primary health care facilities lacked knowledge about the importance of antenatal care attendance. Women were given no knowledge due to a lack of health care practitioners. The lack of knowledge of antenatal care directly influenced the need to seek antenatal care services from rural primary health care facilities. The challenging situation was confirmed by participants who said:

"Iiiiii I don't know anything about what you asked." "Ummmm firstly I don't know much about the antenatal care services you asked me about. Secondly, when I get pregnant…ummmm you have seen my grandmother, whom I live with...eeeeh she does everything for me...all the checking and whatnot". "I don't use the services at all". (Participant 3)

Some participants were aware of the services and what they are for but lacked an understanding of the importance of the services, as all of them did not attend them. The responses are as follows:

"Aaaah . these services I know about them but I just don't take time to understand them. I have never had the time to do that." (Participant 5)" One participant reported that she did not know anything until the 5th

Table 1: Themes and sub-themes

Theme	Sub-themes
1. Factors influencing antenatal care uptake in rural primary health care facilities	1.1 Poor knowledge of the importance of antenatal care visits
	1.2 Affordability: Economic status, Low income
	1.3 Accessibility. distance from home to the health facility

pregnancy. She had this to say: *"As old as I am now….I….I gave birth to my children…ah...I got to know some things about pregnancy and birth to my 5th child."*

Sub-theme 1.2: Affordability - Economic status, Low income

Most pregnant women and their spouses were unemployed. The economic hardships due to lack of income influenced their uptake of antenatal care negatively. Low income directly affected the use of antenatal care by women in rural primary health care facilities. Most of the participants had no form of employment. The data showed that participants linked their low-income status with their low uptake of antenatal care. In support of the views that most pregnant women and their spouses were unemployed, one participant had said: *"As I said it is too far for me to go and I and my husband do not have jobs so there is no money to spend on transport to take me to the clinic for my visits. Money is not easy to find in this country, let alone in rural areas. It is hard. Again it is too much of a distance for a pregnant woman and I can no longer go for visits. I will only go for delivery."*

Participants also revealed that it is a waste of time and resources to attend the antenatal visits under the current economic situation in the country: *"You see…the clinic is too far away and I walk there for immunizations; now imagine going for checkups with pregnancy at such a distance. It is a waste of time for me plus I have never had a problem in any of my pregnancies. I don't have any problem with the medicine that the grandmother gives for the pregnancies. It saves me a lot of time. I give birth at home with the help of grandma and it works for me. "It's just a waste of time to go and come back without being attended..sometimes the clinic will be flooded with people. It's stressing sometimes."*

Sub-theme 1.3: Accessibility - distance to the facility

Participants also shared their views regarding the accessibility of antenatal care services at rural primary health care facilities. Participants mentioned accessibility as a contributory factor to the uptake of antenatal care. Participants were of the view that the health facilities are too far away from where they live, and this made it difficult for them to travel such long distances with a pregnancy. However, most pregnant mothers walk 5 kilometers or more to the clinics but they do not go for antenatal visits regularly due to the long distances. One participant indicated that: *"You see…the clinic is too far away and I walk there for immunizations. Now imagine going for checkups with pregnancy at such a distance. It is a waste of time for me plus I have never had a problem in any of my pregnancies. I don't see any problem with the medicine the grandmothers are giving me for the pregnancies. It saves me time. I give birth at home with the help of grandmas and it works for me."* Another participant confirmed traveling for a long distance before reaching the clinic: *"As I said, it is too far for me and my husband is unemployed, so there is no money to spend on transport, to take me to the clinic for my visits. Money is not easy to find in this country let alone in the rural area. It is hard. Again it is a long-distance for a pregnant woman and I can no longer go for visits. I will only go for delivery." "…The clinic is too far away. When you are heavily pregnant, you cannot walk long distances anymore*.

Discussion

Most participants were young mothers aged 20 to 30 years (54.55%). One participant was over 40 years showing that young women do not attend antenatal care, which contradicts findings by Joshi, *et al*[14] who reported that more women knew the risk that comes with age and parity, especially after the third child. As a result, they seek care more than younger women. There was a reduction of attendance throughout the second and third pregnancies[14].

Many participants had a lower level of education under form 6 and were thus not attending antenatal care services. Educated women who had a tertiary education sought care more than uneducated women[14]. There is lower attendance among women

from a low educational background in South Africa, as compared to the educated women in Birmingham[15]. Sixty percent of the women in San Antonio attended early and it was attributed to the high education status[16].

Most of the study participants were unemployed. This is attributable to the low income which is found to be a predisposing factor to the utilization of antenatal care. There is an inverse relationship between income and utilization of care. Mothers who were from low-income families did not make time to go for antenatal care services as much as the ones with high income[17]. A higher income makes it easy for women to utilize antenatal care[16]. The participants were all married. This concurred with the study by Sunil[16] who concluded that women who were married initiated antenatal care less than women who were not married[16]. However, there was no relationship between being married and the utilization of antenatal care[17].

The current study found that most participants had 3 to 4 children, which correlates with the findings that the utilization of antenatal care is affected by parity. As the age of the women in Ethiopia increases through parity, utilization of care decreases, and also found out that planned pregnancies increase antenatal care attendance[18]. High parity comes with perceptions that all succeeding pregnancies will have no complications as the first one[19]. Most participants lived 3 to 4 kilometers away from the health care facility. Women who lived more than 2 kilometers did not utilize the primary health care clinic, instead of care clinic, they resorted to traditional methods of antenatal care. Most of them ended up consulting traditional birth attendants, rather than a skilled western service provider[20]. Long distances to clinics also affected rural Nigerian women. Thus, the utilization of antenatal care decreased[21]. Women in rural areas attended less antenatal care as a result of poor accessibility of antenatal care services in terms of long distances to the health centers[17].

Knowledge and understanding of antenatal care have proved to be a vital determinant of antenatal care attendance. If women do not know why it is important, their visits are most likely to decrease. This study found that women did not know the importance of antenatal care. This is because most participants had shown poor knowledge of the importance of antenatal care attendance. However, some participants showed that they have some knowledge of antenatal care but they did not know why it is important. Some women did not know about antenatal care at all. Others did not want to know anything about antenatal care and its importance in the growth of the baby.

In Japan which found that Japanese women without any knowledge about antenatal care did not receive care. However, those who knew what it is and the benefits it brings were able to get care[22]. The study also revealed that in rural areas knowledge about antenatal services is not always available for women. This was due to the shortages of health care providers in the rural clinics, whereby one or two nurses would be providing health care for a greater catchment area whereby all the services had to be given to the whole community. Some of the services were not being provided to the full capacity; hence those who attended antenatal care were not provided with the full package of the services, resulting in some doubts and changes of perceptions towards the services. Most of the rural women would go and not get attended hence it reduced their need motivation to go for the services as they were not being provided with the services at full capacity[22].

In Malaysia it was seen that women in rural areas did not know the importance of seeking antenatal care; hence, the utilization was very poor. Rural women were not getting enough awareness of antenatal care matters. Furthermore, the importance of the development of the baby was not instilled in them; hence, they were not attending regularly[22]. Also, a lack of understanding of the importance of antenatal care decreases its utilization. Pregnant women who have some knowledge about antenatal care can have changed behavior[23]. Women in rural areas lack knowledge about antenatal care and why it is important to visit a health care provider; hence, they do not use the services provided for them[24].

On the other hand, a study which was conducted in India showed that women had adequate knowledge about antenatal care; hence, they attended more often because they understood the importance of antenatal care visits. These women were from rural areas in India but they were given enough education to promote their attendance[25].

This study found that most participants were affected by economic hardships. The majority of the

participants did not have any form of employment but were educated. Only two participants had formal employment. Financial variability is one of the most important determinants of the uptake of antenatal care services in rural women, especially if both the woman and the man are unemployed. Low income is a predisposing factor in the uptake of antenatal care in this study. Most of the participants had no form of employment. The data showed that participants linked their low-income status with their low uptake of antenatal care.

Economic hardships reduce the likelihood of utilizing antenatal care services by women in rural areas and those with no jobs. Low economic status is greatly associated with lower levels of attendance, meaning that those women with low incomes do not attend as much as those with high incomes. Studies have confirmed that women who earn a salary or who have working partners are more likely to attend antenatal care services than those who do not have any working members in their family[26].

Women from rural and low socio-economic backgrounds did not use antenatal care services. However, those from high socio-economic backgrounds found it easier to access antenatal care services. Rural areas are mostly poverty-stricken, making it difficult for people to access health care, as it is always free. Antenatal care services are now free in most parts of Africa. However, they are affected by shortages of equipment and drugs to sustain the health services provided. This shortage leads to poor utilization of most health services, as most people would have to buy medicine and pay for health care services if there is such a shortage[25].

Participants also shared their views regarding the accessibility of antenatal care services at rural primary health care facilities. Participants mentioned accessibility as a contributory factor to the uptake of antenatal care. Participants were of the view that the health facilities are too far away from where they live, and this made it difficult for them to travel such long distances with a pregnancy. In rural Zimbabwe, households are dispersed and a public clinic is placed where it is believed to be central. However, most pregnant mothers walk 5 kilometers or more to the clinics but they do not go for antenatal visits regularly due to the long distances.

The study shows that distance to the facility is a contributory factor to the uptake of antenatal care services in rural primary health care facilities. Rural residences are mostly associated with low utilization of health care services. People who live in rural areas are most likely to attend fewer health care services provided. In rural Nepal, women who lived more than 2 kilometers from the primary health care clinic did not utilize the healthcare clinic. Instead, they resorted to traditional methods. Most of them ended up consulting traditional birth attendants, rather than a skilled service provider[27].

In the current study, the average distance was 3 kilometers from the clinic. Some participants walked 4 and 5 kilometers to the clinic and they responded that it was too long a distance for someone pregnant. The distance itself prevented them from seeking antenatal care services and most of the participants preferred to go for immunizations and birth, rather than go when they were still pregnant. Amna[28] revealed that 72% of the women who booked late for antenatal care services had challenges of distance to the health care facilities. The clinics were too far away and the women always booked very late. Some booked and never went back for other visits, meaning that most women only have one visit to the antenatal care center. Distance has thus been found to hinder the uptake of antenatal care services[27]. Long distances to clinics also affected rural Nigerian women, and the utilization of antenatal care also decreased[21]. Women in rural areas who attended antenatal care are very little, as a result of poor accessibility of antenatal care services in terms of long distances to the health centers. This correlates with the findings of the current study. Accessibility of antenatal care is a determining factor in the uptake of antenatal care services. The distance to an antenatal care facility, availability of the transport, and cost of the transport hindered women from seeking antenatal care earlier[17].

Ethical Consideration

Permission was obtained from the Zimbabwe District Health Administrator and the Village Chiefs before conducting the study. Participants were given sufficient information regarding the purpose of the study, and were not coerced into participating but were encouraged to participate. The issue of confidentiality and privacy were observed and upheld throughout the study. The participants were

clarified that no identifiers will be captured on field notes except for a pseudonym or a coded identifier. Codes instead of names were used to ensure anonymity.

Furthermore, all recorded information will be for the sole use of this study and nothing else. Participants were reassured that their details and the information they provided will only be shared with those directly involved in the study. The ethical clearance (SHS/18/PH/13/0706) was obtained from the University of Venda Research Ethics Committee. Informed verbal consent was also obtained from each interviewed participant. Participants were informed that participation was voluntary and that they could freely withdraw from participating at any time and that no rewards were to be given.

Conclusion

The purpose of the study was to explore the utilization of antenatal care in Mutasa district in Zimbabwe. The study findings revealed that lack of knowledge about the importance of antenatal care attendance, lack of income, and distance to the health facility affected the utilization of antenatal care services in the rural primary health care facilities in Mutasa district of Zimbabwe by pregnant women and childbearing mothers. Therefore, the study recommends the use of village health care workers, to identify pregnant women who cannot access the health care facility in terms of distance. And these village health workers can be taught how to provide antenatal care services and to do follow-up visits to pregnant women who miss their review dates.

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