

Evaluation of Healthcare Services for Pregnant Women and Access to Health Information among Rural Women in Northern, Tanzania

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Abstract: This study focused on the evaluation of Healthcare Services for Pregnant Women and Access to Health Information among Rural and semi-urban Women. This study was a household Survey conducted with a stratified and random sample of 140 Tanzanian women aged 45 or below who had previously given birth and/or who were pregnant during the data collection. The sample stratification involved four rural villages in the Same District of the Kilimanjaro Region (105 total respondents), and one peri-urban village in Arumeru District of Arusha Region (35 total respondents). Survey responses were recorded on paper forms and entered into an electronic system for analysis. Findings revealed that there were challenges facing the provision of maternal healthcare services in both rural and peri-urban villages. Furthermore, the study revealed that information about maternal healthcare in rural and peri-urban areas is limited and mainly received from health facility and healthcare workers as the main trusted health information source. The study concludes that even if a pregnant woman manages to reach a health facility, may only be provided with the most basic of services and often have to be referred to a hospital even farther away in the case of complications. Furthermore, the study concludes that women surveyed suffer from the shortage of information sources regarding maternal and child health. The study recommends that the government should observe healthcare services for pregnant women with an Eagle eye as they need serious attention by addressing all the identified challenges in order to rescue the current situation.

Keywords: Health Information, health services, pregnant women, rural women, peri-urban village

1.0 Introduction

An estimated 8,200 women and girls die in Tanzania each year from pregnancy and child birth-related complications, and this is why it is so important that every pregnant woman should have access to a midwife (Boniphace et al., 2021). Midwives are skilled an estimated 8,200 women and girls die in Tanzania each year from pregnancy and child birth-related complications, and this is why it is so important that every pregnant woman should have access to a midwife. Midwives are skilled to provide 90% of women's reproductive, pregnancy, and post-natal care needs, but despite a favorable political climate, several challenges exist to sustaining and building on gains in perinatal health. In many low to middle-income countries including Tanzania, traditional birth attendants (TBAs) play innumerable roles such as the provision of health education, referral to hospitals, and delivery support that can theoretically increase women's access to healthcare (Shimpuku et al., 2021). Knowledge about birth preparedness and complication readiness is a key factor in achieving Birth preparedness and complication readiness (BPCR) (Moshi et al., 2021). Proper knowledge of BPCR could be attained through the use of reliable health information sources and access to reliable health facilities. However, it is not clear whether pregnant women have access to healthcare services and reliable health information in the study area.

There is therefore a need for further research to evaluate healthcare services for pregnant women and determine their access to health information among Rural Women to advise the government and other stakeholders on the best ways that pregnant women could be well informed.

2.0 Methodology

This study was a household Survey conducted with a stratified simple random sample of 140 Tanzanian women aged 45 or below who have previously given birth and/or who were pregnant during the data collection period. The sample stratification involved four rural villages in the Same District of the Kilimanjaro Region (105 total respondents), and one peri-urban village in the Arusha District of Arusha Region (35 total respondents). Within the five survey strata, households were selected randomly, and a significant distance was traveled between households to avoid clustering of respondents. While generally one woman was selected per household, in a limited number of instances 2 to 3 respondents were chosen. These women came from Masai households, where it would be culturally inappropriate to interview one woman while ignoring others. Also, where possible efforts were made to track down women who were not at home, to avoid overtly biasing the sample through only selecting women who happened to be at home. All survey responses

were recorded on paper forms, after which data were entered into an electronic system for analysis.

3.0 Results and Discussion

3.1 Marital status

Out of 140 women under study, 84.29% were married, 10.48% were single, and 5% were divorced while 2.86% were widows as indicated in Table 1.

Table 1: Marital status

	Single	Married	Divorced	Widow
Rural	11(10.48%)	86(81.90%)	6(5.71%)	2(1.90%)
Peri-urban	0(0.00%)	32(91.43%)	1(2.86%)	2(5.71%)
Total	11(10.48%)	118(84.29%)	7(5.00%)	4(2.86%)

It is clear from Table 1 that the majority 118 of the women in the study area both in rural and urban areas were married. The findings of this study concur with the findings by (Dewau et al., 2021) who conducted a study on “Time to initiation of antenatal care and its predictors among pregnant women in Ethiopia: Cox-gamma shared frailty model” and revealed that most 93.67% of the women in the study area were married.

3.2 Pregnancy status

Concerning pregnant status, the study revealed that 12 women from both rural and peri-urban villages had previously given birth and were also pregnant during data collection. It was also revealed that the majority 125 of women in the study area had previously given birth but were not pregnant during this study while only 3 women had never given birth and were also pregnant during this study as summarized in Table 2

Table 2: Pregnancy status

	Has previously given birth and is currently pregnant	Has previously given birth but is not currently pregnant	Has never given birth and is currently pregnant
Rural	10(9.52%)	92 (87.62%)	3 (2.86%)
Peri-urban	2 (5.71%)	33 (94.29%)	0 (0.00%)
Total	12(8.57%)	125 (89.29%)	3 (2.14%)

Although the majority 89.29% of the respondents had previously given birth and were not pregnant during this study this implies that the study had the perfect respondent who had great experience of healthcare facilities, services, and health information accessibility in the study area.

3.3 HEALTHCARE FACILITIES AND SERVICES FOR PREGNANT WOMEN

Respondents were required to indicate the kind of transportation they use to get to the closest health facility. Findings revealed that out of 140 respondents 84(55.26%) traveled on foot, 65 (42.86%) used motorcycles, and 2 (1.32%) used daladala (public transport) while only 1(0.66%) rented car as shown in Table 3.

Table 3: Transportation used to get to the Health Facility

	On foot	Motor cycle (Bodaboda)	Daladala	Rented car
Rural	66(56.41%)	50(42.74%)	1(0.85%)	0(0.00%)
Peri-urban	18(51.43%)	15(42.86%)	1(2.86%)	1(2.86%)
Total	84(55.26%)	65(42.76%)	2(1.32%)	1(0.66%)

It was important to know the type of transport used by women to reach the closest health facility because the kind of transport used determines how fast a person could reach the health facility. Thus, it is clear from the findings of this study that most of the women were able to afford the cost of renting a car, motorcycle (Bodaboda), or even to pay for the daladala fare. The study by (Ngowi, 2021) noted that healthcare services are powerfully subjective to the type and quality of services available in the native area and

the time, distance, cost, and easy of traveling or walking to reach those services. Another study by (Ayele et al., 2021) suggests that most women do not get into the closest health facility on time to receive proper healthcare services from reliable experts in most of the peri-urban villages because of transport inaccessibility and the inability to cover transport cost. This implies that the government has to improve transport infrastructural facilities in rural and peri-urban areas to attract more transport agents and would eventually reduce the cost of transport.

3.4 Time taken to reach the facility

Respondents were asked to indicate the time taken to reach the nearby facility for health services. Findings show that the time taken to reach the facility in both rural and peri-urban villages had a median of 2 hours as indicated in Table

Table 4: Time is taken to reach the facility

	Average	Median
Rural	2.6hours	2hours
Peri-urban	2.1hours	2hours
Total	2.5hours	2hours

It was important to know the time taken by the women to reach the facility to know if they comply with the standards of the World Health Organization (WHO). However, in most African countries this is still a great challenge as most of the facilities are farther away from people's residents especially in rural areas. This is in line with (Dewau et al., 2021) who revealed that long-distance from health facility and nomadic region residency were hindering factors of early antenatal care visits. The longer the time taken to reach the nearest hospital, the propensity for women to utilize healthcare services especially maternal services decrease (Puspitasari & Bulan, 2021).

3.5 Availability of Staff in the Health Facilities in Rural and Peri-Urban Areas

Respondents were asked to indicate the availability of staff in health facilities where they receive health services. Findings in Table 5 shows that 63 (45%) of the respondents indicated that staff in health facilities were available and the majority 76 (54.29%) said there were no staff while only 1 (0.71%) said they don't know as summarized in Table 5

Table 5: Availability of Staff in Health Facilities

	Yes	No	Don't know
Rural	45(42.86%)	59(56.19%)	1(0.95%)
Peri-urban	18(51.43%)	17(48.57%)	0(0.00%)
Total	63(45.00%)	76(54.29%)	1(0.71%)

The findings indicate that both rural and peri-urban villages have an inadequate number of health workers and this situation compromises the quality of health services provided in those health facilities. The demand for and supply of health staff are largely underpinned by low levels of training outputs, insufficient remuneration, inadequate funding, and migration among others (Asamani et al., 2021).

3.6 Availability of Maternal Health Services

Researchers also wanted to know the availability of maternal health services in the health facilities available in the study area. Findings revealed that a total of 81 out of 105 rural respondents (77.14%) reported that there were no maternal health services available where they live. Of those who reported availability of some kind of service, only the most basic of services were reported such as pregnancy tests, blood tests, urine tests, and vaccinations. A small number of respondents noted that flying doctors were periodically available where they live. For the peri-urban respondents, essentially all of them reported no maternal health services being available where they live.

3.7 Access to Health Information and Education

The researchers wanted to know if women in the study area in the last 3 months have seen or heard announcements related to pregnant women. Findings in Table 6 shows that the majority 135 (96.43%) respondents had no access to any announcements

related to pregnant women in both rural and peri-urban villages and only 5 (3.5%) had access to the announcements related to pregnant women.

Table 6: Accessibility to announcements for pregnant women

	Yes	No
Rural	4(3.81%)	101(96.19%)
Peri-urban	1(2.86%)	34(97.14%)
Total	5(3.57%)	135(96.43%)

From the finding in Table 6, it means that women in both rural and peri-urban villages face a critical challenge of inadequate sources of health-related information. Establishing public libraries with well-health subject librarians could assist in the dissemination of health information to both rural and peri-urban dwellers.

3.8 Source of Health Information for Pregnant Women

Since some respondents revealed to heard announcements related to pregnant women in the study area the researcher wanted to exactly what were the sources of such announcements?. It was established that though the vast majority 96.43% of respondents have not heard any announcements for pregnant women in the last 3 months, the few who did mention seeing or hearing them at hospitals, village government offices, announcement trucks, and at reproductive health service centers.

3.9 Information Regarding Maternal and Child Health

Respondents were asked if they had been given information by anyone regarding maternal and child health. Findings of this study revealed that 128 (91.29%) never received any information regarding maternal and child health from anyone and only 12 (8.57%) reported to have received information regarding maternal and child health as shown in Table 7.

Table 7: Receipt of Information Regarding Maternal and Child Health

	Yes	No
Rural	10(9.52%)	95(90.48%)
Peri-urban	2(5.71%)	33(94.29%)
Total	12(8.57%)	128(91.43%)

More than 90% of the respondents have never received Information Regarding Maternal and Child Health this implies most people in the rural and peri-urban villages need to be rescued by providing them with reliable and accurate health-related information through reliable information dissemination channels. The government needs to employ more doctors and nurses and place them in rural and peri-urban villages’ health facilities for them to act as health information disseminators at least could assist in addressing the health information paucity people in the study area are facing.

3.10 Access to Health Information on Maternal and Child through Mobile Phone

A mobile phone being one of the key sources of information in the current world, the researchers wanted to know whether respondents have been using them to access information about maternal and child health. Out of 140 respondents from both rural and peri-urban villages, 135(96.43%) respondents reported having never received or looked for information about maternal and child health through their mobile phone while only 5(3.57%)reported having received or accessed health information through their mobile phones. These findings are summarized in Table 8.

Table 8:Use of mobile phone to access Health Information

	Yes	No
Rural	4(3.81%)	101(96.19%)
Peri-urban	1(2.86%)	34(97.14%)
Total	5(3.57%)	135(96.43%)

The findings indicate that mobile phone is minimally used by people in the study area to receive or access health information on maternal and child health. This could be attributed to several factors such as internet cost, internet connectivity problem, type of phone used, and poor information search skills.

3.11 Place where People get Information

Respondents were requested to indicate where they go to get information or help regarding maternal and child health. Findings in Table 9 shows that 112 (87.5%) get information from the health facility, 6(4.69%) from a healthcare worker, and 8(6.25%) from the local government while 2(1.56%) reported getting information from midwives.

Table 9: Place where People get Information

	Health facility	Healthcare workers (other than midwife)	Midwives	Local Government
Rural	83(88.30%)	6(6.38%)	2(2.13%)	3(3.19%)
Peri-urban	29(85.29%)	0(0.00%)	0(0.00%)	5(14.71%)
Total	112 (87.50%)	6(4.69%)	2(1.56%)	8(6.25%)

From the study findings, it is clear that the majority of more than 85% of the respondents depend very much on the health facility as the place where people get information regarding maternal and child health. This is probably has been contributed by the requirement for infants and pregnant women to attend meetings at health facilities that intends to provide education and information that would improve the health and nutrition levels of pregnant women, nursing women, infants, and preschool-age children from extremely poor households (Pitoyo et al., 2021). Health practitioners in various health facilities have the mandate to create health in which is accurate, ac-accessible, comprehensive, relevant, precise, and current for people's consumption (Mugo & Uimbia, 2021).

3.12 Trusted Source of Information About Maternal and Child Health

Respondents in the study area were asked to indicate the source of information about maternal and child health which they trust most. This was important because by knowing the source of information that is most trusted by the community could be possible to recommend to the government the availability of that source of information to a particular community. In this study, it was revealed that 63(47.37%) of the respondents trusted Healthcare workers (other than midwives), 48(36.09%) health facility and 13(9.77%) Local Governments while only 9(6.77%) trusted Midwives as summarized in Table 10.

Table 10: Trusted Source of Information about Maternal and Child Health

	Health facility	Healthcare worker (other than midwife)	Midwife	Local Government
Rural	37(38.14%)	42(43.30%)	9(9.28%)	9(9.28%)
Peri-urban	11(30.56%)	21(58.33%)	0(0.00%)	4(11.11%)
Total	48(36.09%)	63(47.37%)	9(6.77%)	13(9.77%)

It is clear from the findings of this study that the majority 47.37% of the respondents mostly trust healthcare workers which implies that healthcare workers play a great role in the dissemination of health-related information in both rural and peri-urban villages. However, the study by(Mayerová & Abbas, 2021; Jiang et al., 2021) revealed that social media is currently the main source of health information and the highly trusted sources of information on vaccines, maternal characteristics such as the age of childbirth, education, marital status, and household head status. Furthermore, the study by (Jiang et al., 2021)supports that access to pregnancy care information via the hospitals' official social media accounts was found to be associated with a significantly lower risk of perceived stress and thus is the most trusted source of information in the Covid-19 pandemic.

4.0 Conclusion and Recommendation

Conclusion: The overall picture painted by the results of this household survey is that major challenges are facing the provision of healthcare services in both rural and peri-urban villages. Thus, the study concludes that travel times to health facilities are large, nearby maternal and child services are largely non-existent, and facilities are often not staffed. The study further concludes that even if a pregnant woman manages to reach a health facility, she may only be provided with the most basic of services and will often have to be referred to a hospital even farther away in the case of complications. Additionally, the study concludes that the women surveyed also suffer from the shortage of information sources regarding maternal and child health.

Recommendation: Based on the findings of this study the researchers suggest that the government should observe healthcare services for pregnant women in rural and peri-urban villages with an Eagle eye as they needs serious attention by addressing all the identified challenges in order to rescue the current worse situation. The study recommends that the government should construct public libraries and establish adequate information centres in rural and peri-urban areas in order to increase the rate of accessibility of health information among the people in the country.

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