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HOW DO VICTIMS ACCESS INFORMATION ON FREE VESICO-VAGINAL FISTULA REPAIR AND TREATMENT AMONG PATIENTS IN NORTHWEST NIGERIA?

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ABSTRACT

Vesico-vaginal fistula (VVF) is a medically manageable ailment. Despite the Nigerian government and other stakeholders implementing interventions to provide free VVF surgical repair, there is still limited access to the services. This study examined how victims access information on free VVF repair intervention. The research employed a qualitative approach, utilizing the Focus group discussion (FGD) method. The researcher purposively selected two centers in Northwest Nigeria, namely, Hajiya Gambo Sawaba General Hospital, Zaria, Kaduna State, and National Obstetric Fistula Centre, Babbar-Ruga, Katsina State. Two FGD sessions were conducted in each of the centers. A total of 22 participants were featured in the sessions. Thematic analysis was used to analyze the FGD data. Findings showed that the radio was the dominant channel for accessing information on free VVF repair services, particularly in rural areas of Northwest Nigeria. Interpersonal sources, including healthcare personnel and family members, also played key roles in facilitating treatment seeking. Findings also showed that the understanding of VVF repair and treatment messages was high due to clear culture-sensitive delivery in messages in Hausa and Fulfulde. Participants also easily recalled radio jingles and face-to-face conversations, emphasizing that treatment was free. The study thus concluded that radio is a highly accessible and influential medium for disseminating VVF treatment messages, such as requiring family or spousal consent to go for treatment, which can hinder uptake. The study thus recommends combating misconceptions through healthcare experts and family members to promote positive treatment-seeking behaviors among VVF victims in Northwest Nigeria.

Keywords: VVF, Communication channels, Treatment-seeking behavior, Northwest Nigeria

1.0 INTRODUCTION

Maternal health is one of the pressing issues in sub-Saharan Africa and a major indicator of Sustainable Development Goal 3 (SDG 3). As Africa's most populous country, Nigeria is faced with a substantial load of maternal health problems, particularly in its Northern regions. One of the most severe manifestations of these challenges is Vesicovaginal fistula (VVF), which is closely linked to prolonged and obstructed labor resulting from limited access to timely and quality obstetric care (Morhason-Bello et al., 2020).

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Available statistics indicate that Nigeria accounts for a disproportionately high share of the global VVF burden, with an estimated 400,000 -800,000 women living with unrepaired VVF. The majority of the cases are concentrated in Northern Nigeria (Okoye et al., 2019). The high prevalence of VVF in this region is driven by a combination of interrelated factors, including entrenched peculiarities such as sociocultural and religious norms, harmful traditional practices, and widespread misconceptions surrounding pregnancy, childbirth, and women's health. These contextual factors not only increase women's vulnerability to VVF but also influence how the condition is perceived and addressed within affected communities.

Intimately connected with these structural and cultural factors are socioeconomic and environmental factors, including poverty, the lack of female education, child marriages, and other destructive traditional activities, including female circumcision (Didiugwu et al., 2017). Specifically, early marriage has been cited as a key aspect that triggered VVF since girls are not always physically ready to give birth to a child at an early age (Maishanu, 2023). Early marriage is prevalent in Northwest Nigeria, with approximately 76 per cent of women in the country getting married before 18 years, 43 per cent before 18 years, and 17 per cent before 15 years (UNFPA, 2020). Such conditions pose a great risk of a long labor term and later occurrence of fistula.

In addition to the physical effects of VVF, there are also extensive social and economic effects of the disease on the afflicted women. Most of the victims face marital separation or divorce and are usually ostracized by their families and communities, citing the continuous leakage of urine, the odor of urine, and infertility. This leads to extreme economic marginalization among a significant proportion of women and an inability to participate in sustainable livelihoods, and some of them have to resort to street begging, hawking sachet water, or selling firewood to make a living (Degge et al., 2023). These facts illustrate the multidimensional and complex nature of VVF as a medical and social challenge in Northern Nigeria.

Several awareness campaigns are put in place to deal with the Vescio-vaginal fistula in Northern Nigeria. These are the Campaign to End Fistula initiated by the UNFPA, the state-based maternal health sensitization programs, the outreach efforts of non-governmental organizations and faith-based organizations, and the community-based advocacy efforts by health institutions and development partners. To some extent, these interventions are backed by the federal and Northern governments, local and international partners. Mainstream media, especially the radio, have significantly contributed to spreading VVF-related information in Northern Nigeria (Marcus, 2021). This dependence on radio stems from its broad coverage, affordability, and availability to rural and low-literacy communities. This research, therefore, focuses on studying the effectiveness of the communication media used in disseminating information about free VVF repair and treatment services.

Despite numerous initiatives in Nigeria's Northern states, the incidence of VVF remains

alarmingly high, with the region bearing the highest burden of cases in the country (Nwala et al., 2022). Organizations like Médecins Sans Frontières (Doctors without Borders) support awareness-raising, free surgeries, and rehabilitation programs for VVF patients in several Northern Nigerian states, complementing broader efforts to combat the condition (Didiugwu et al., 2017).

Nevertheless, the continued interventions have not significantly reduced the persistence of Vescio-vaginal fistula cases in the region. Many women still turn up late for treatment or are unaware of the existence of free services. This indicates that current communication activities might not be effectively reaching or comprehensible to the beneficiaries concerned. A clearer understanding of the causal chain, from media exposure to actual clinic visits, is necessary. For instance, a logic model illustrating how radio jingles translate into clinic visits could identify key leverage points. These points may include awareness creation through media broadcasts, the role of interpersonal communication in the decision-making process, and the criticality of obtaining consent from family members, which often becomes a bottleneck.

Highlighting and understanding these pathways can spotlight actionable leverage points for practitioners, aiding in the development of more effective communication strategies. Thus, the need to investigate the effectiveness of communication channels used in disseminating information about VVF repair services is a challenge that this current research aims to explore.

Although VVF is treatable, the problem persists. Despite concerted efforts to address the backlog of cases through free treatment programmes organized in collaboration with the government and partners, progress remains slow (Maishanu, 2023). From the empirical perspective, existing studies on VVF have primarily focused on medical aspects (Nwala et al., 2022; Raji et al., 2018; Lengmang & Degge, 2017), awareness and community perception of mediated messages (Marcus, 2021; Ezeonu et al., 2017; Didiugwu, 2017), community misconceptions about the aetiopathogenesis and treatment of VVF (Umoiyoho & Inyang-Etoh, 2012), and the experiences of women awaiting repair (Okoye et al., 2019). Research on people living with VVF has largely examined misconceptions about the treatment and the lived experiences of affected women. However, there remains a significant gap in understanding the media's role in disseminating information about VVF repair and treatment, as well as its effectiveness in supporting patient rehabilitation and reintegration. Furthermore, despite the Federal Ministry of Health's National Strategic Framework for the Elimination of Obstetric Fistula (2019-2023), the effectiveness of the communication strategies used in rehabilitation and reintegration programmes at VVF centers in Northern Nigeria, particularly the Northwest, remains unclear due to a lack of literature and empirical studies.

Grounded in the premise that clear and easily understood information is important for

acceptance of medical intervention, this study assessed the communication strategies used to disseminate information on free VVF repair and treatment services in Northwest Nigeria. Using focus group discussions, the study examined how these communication efforts influenced VVF patients' access to information and understanding of repair and treatment messages.

Accordingly, the objectives of the study were to:

i. Identify the communication channels used by VVF patients to access information on free VVF repair services; and
ii. Assess the level of understanding of VVF repair and treatment messages among VVF patients

1.1 LITERATURE REVIEW

1.1.2 Communication Channels for Reaching Non-Literate Audience on Maternal Health Information: Maternal health information diffusion is concerned with the provision of information to women, families, and communities in low-resource environments on the benefits of prenatal care, warning signs, and such complications as vesico-vaginal fistula (VVF), which is the result of protracted obstructed childbirth. Good channels facilitate prevention, utilizing competent birth attendance and early intervention (Didigwu et al. 2017; Sanusi et al., 2021). The use of verbal and written strategies enables the non-literate rural people to make healthier decisions through mass media, interpersonal, small group, or community campaigns (Ojeka-John et al., 2024). These channels are differentiated into the mediated channels (such as broadcast and print channels) and interpersonal channels, which serve to close information gaps, lessen the unfulfilled information needs, and enhance improved outcomes in terms of awareness, message understanding, and use of the services of the free VVF repair and treatment services, the centre of interest of this study.

1.1.3 Radio and Television as Mass Media Channels: VVF prevention messages are widely spread in the broadcast media, such as the radio and television, through discussions, dramas, and expert programmes, which increase awareness and behavioral change in low-resource regions (Marcus 2021). Radio is cheap and oral and appeals to illiterate listeners because it involves panel discussion, interviews, phone-ins, and repetition to remind listeners of the need to seek healthcare at the right time and the need to connect with the culture (Sanusi et al., 2021). Community radio increases participation and knowledge. Print media, including newspapers, flyers, brochures, and posters, will ensure references to the causes and therapies of VVF and prevention are long-lasting, which will enhance campaigns and create a conversation (Federal Ministry of Health, Nigeria, 2020). Local languages with illustrated materials can support low-literacy groups, and Nigerian research indicates that all VVF patients reported the use of flyers as useful in the awareness of the risks of prolonged labor and promotion of birth in hospitals (Morhason-Bello et al., 2020)

1.1.4 Interpersonal Channels: The favorable outcome of interpersonal channels in changing behavior is that the use of trust enables personalized VVF messages. The use of this includes personalized counselling, referrals, stigma reduction, and household visits by healthcare workers and community health workers, which are supplemented with eradication strategies through training (Odoemelam & Ebeze, 2015). Friends, family members, and neighbors are informal interpersonal networks that can be particularly significant in offering emotional support and peer validation in making maternal-level health-related decisions. These interpersonal sources were also found to be similar in the context of this study, as they also play a major role in influencing the awareness and the reaction of the VVF patients to the information regarding the free repair services. Although it was previously established that this type of network can have a positive effect on the utilization of antenatal care, these networks can also spread misinformation when not adequately advised (Ogundoyin, 2020). This observation is consistent with the current paper, wherein a few respondents said that they need to seek clarification with members of the family before taking action on treatment messages. Moreover, opinion leaders and religious leaders were found to be effective interventions to dispel the myths, promote the use of the services, and affect the social norms, such as the attitudes towards early marriage (Okoye et al., 2019; Federal Ministry of Health, Nigeria, 2023). In line with this fact, the present study found that community persons of trust and family gatekeepers decisively influenced the process of seeking treatment against VVF, especially where the spousal or family consent was involved. This highlights the need to involve powerful interpersonal actors in VVF communication strategies in Northwest Nigeria.

1.1.5 Other Channels: Low-literacy audiences read visual/graphics such as illustrated flyers, posters, billboards, comics, icons, and charts with ease, allowing them to be more effective than text, provided they are culturally relevant. They were also useful in outbreak campaigns in Nigeria, where billboards provided continuous publicity on danger signs. The culture-related channels of indigenous messages comprise town criers to make trusted announcements about immunization and VVF, talking drums to mobilize, with a limited range (Umoiyoho & Inyang-Etoh, 2012), and community dramas as a reflection of the local attitudes to specific changes (Marcus, 2021; Raji et al., 2021). The use of Short Message Service (SMS) and Interactive Voice Response (IVR) allows sending anonymous reminders and education that enhances the attendance of antenatal and skilled delivery of childbirth through applications such as Text4Life (Ezeonu et al. 2017). Millions of people are covered by NGO outreach, including Nigeria MOMENTUM with town halls and screenings (Nwala et al., 2022).

1.2 Theoretical Perspectives

From the theoretical angle, this study is anchored on the Theory of Reasoned Action (TRA). In 1975, Fishbein and Ajzen proposed the

TRA, which holds the assumption that intentions cause behavior, which in turn is influenced by attitudes and subjective norms (Fishbein & Ajzen, 2010). These constructs are useful in explaining health-related behaviors, such as assessing VVF treatment in Northwest Nigeria.

The Central constructs are: the behavior is a particular action (for instance visiting a fistula center and seek advice on the repair of the VVF during a free campaign); the intention; positivity/negativity of an evaluation based on behavioral beliefs (treatment restores social acceptance and relief); and subjective norms; perceived social pressure as a result of normative beliefs and motivation to act based on influential figures such as family, community, or a religious leader (Marcus 2021). TRA presupposes that rational actors reason about attitudes and norms to create intentions, and social capital and cultural stigma in the context of such regions as Northwest Nigeria tend to discourage action even in favor of good personal beliefs (Odoemelam & Ebeze, 2015). The weaknesses of TRA are that its conceptualization is too narrow because it does not deal with underlying cognitive processes, emotion, or structural constraints such as access to VVF centers, a factor that assumes over-rational decision-making (Marco, 2012; Blank and Hennessy, 2012). Of much importance to this research, TRA leads the way in investigating the communication mediums, VVF message understanding, sociocultural factors, and message delivery methods in Northwest Nigeria, prioritizing ideologies through user-centered designs, formative assessment of audience attitudes, and message delivery that resonates with culture to defeat stigma and influence behavior change (Didiugwu et al., 2017)

From the empirical angle, Marcus (2021) surveyed 389 women who are not VVF patients in Kano/Katsina, finding that radio messages significantly educated the communities on VVF, impacting lives and recommending extended airtime, though message recall and retention were unexamined. Hence, this present study filled the gap by examining recall and retention of VVF messages from victims of the disease. Didiugwu et al. (2017) used mixed-methods to reveal moderate campaign influence via radio/seminars on underage marriage risks—a key VVF factor—despite language/engagement barriers, advocating local languages and skilled counsellors. Odoemelam and Ebeze (2015) surveyed men in Ebonyi State using the Health Belief Model, showing high radio exposure (especially songs) to obstetric fistula messages, recommending song formats for male participation, limited by regional scope and long-term behavior analysis.

2.0 MATERIALS AND METHODS

This study adopted a qualitative research approach to investigate the communication channels used by VVF patients to access the free VVF repair messages in Northwest Nigeria. The population of this study comprised two groups: (1) channels of communication (such as mass media, interpersonal, and traditional channels) that are used to spread the message about free VVF repair, and (2) human participants (VVF patients under treatment).

In regard to communication channels, purposive sampling was applied in the selection of the most frequently mentioned in the literature, and pertinent to the rural contexts of Northwest Nigeria, such as radio jingles/health programmes, town criers, community health workers, family/interpersonal networks, and referrals from survivors. They were chosen because of their cultural availability, particularly among non-literate rural communities.

The human population of this study was the VVF patients in two purposively selected centers in Northwest Nigeria. They are Hajiya Gambo Sawaba (Gambo Sawaba center) General Hospital in Zaria, Kaduna State, and National Obstetric Fistula Centre (NOFC) Babbar-Ruga, Katsina State. The total population of VVF patients was 305 (Gambo Sawaba had 109; while NOFC Babbar-Ruga had 196) who were receiving treatment as of November 2024. A non-probability purposive sampling technique, complemented by voluntary self-selection, was utilized to sample the human population. Participants were selected based on predefined inclusion and exclusion criteria relevant to the study objectives. Although all eligible VVF patients in the selected centers were informed about the study, participation in the focus group discussions was voluntary, and only those who expressed interest and provided informed consent were included. The inclusion criteria comprised adult female patients aged 18 years and above who were clinically diagnosed with VVF. They were, at the time of the study, receiving treatment or post-repair care at the selected centers as of November 2024. Patients who were able to communicate effectively in Hausa and Fulfulde and were willing and able to provide informed consents were permitted to join the study. The exclusion criteria include patients under 18 years of age, those who were too ill or psychologically distressed to participate in a group discussion, patients who could not obtain consent from their spouses, family, or guardians, and those who declined participation after full explanation of the study.

With the assistance of the Matrons and social welfare officers at each center, the researcher obtained ethical clearance and institutional approval before recruitment. All eligible VVF patients across the two centers were informed about the study through verbal announcements during ward rounds and group health education sessions. The sample size of forty was initially determined as the target recruitment pool to ensure a minimum of two Focus Group Discussions (FGDs) with 8–12 participants each, adhering to the methodological standards for qualitative saturation recommended by Talabi et al. (2024). Interested patients indicated their interest privately to the Matron. Hence, of the forty participants invited across the two centers, only twenty-two participants expressed interest in participating. Hence, there were ten participants in Gambo Sawaba and twelve from NOFC Babbar-Ruga. Talabi et al. (2024) recommended at least two FGD sessions for a study, and each session should have a minimum of eight participants and a maximum of twelve as a quorum. As a result, the study included two discussion sessions.

Data collection instruments used for this study were a semi-structured FGD guide developed by the researcher. The guide comprised sections covering socio-demographic features of the victims; awareness of VVF, sources, channels used to access information about VVF repair; level of comprehension and recall of VVF treatment messages; and barriers, including sociocultural factors that influenced action on received information. Thus, the guide contained eight main open-ended questions and probing questions to elicit in-depth responses. The FGD guide was initially developed in the English language and then translated into Hausa and Fulfulde by a professional translator. To ensure translation accuracy and reliability of the translated guide, the guide was pre-tested on three survivors who were not part of the final sample, to further confirm clarity, cultural appropriateness, and logical flow. To navigate the cultural sensitivities regarding women's speech in Northern Nigeria, access was facilitated through the 'gatekeeper' model, utilizing the hospital Matrons and social welfare officers who hold established trust with the patients. Discussions were conducted in Hausa and Fulfulde (the local languages) in private, female-only hospital spaces to ensure comfort and open expression.

Materials used during data collection included two digital audio recorders for recording discussions with participants' consent, a field notebook, and a pen for documenting non-verbal cues and contextual observations during discussions. Two trained research assistants who speak Hausa fluently were used to moderate the discussion. Light refreshments were provided as a token of appreciation. All FGDs were conducted in Hausa, with Fulfulde interpretation where necessary, in private and comfortable spaces within each treatment center to ensure confidentiality and encourage free expression. To manage data, all audio recordings were transcribed verbatim in the original language by the researcher and the two trained research assistants who are fluent in Hausa. Transcripts were subsequently translated into English for analysis and reporting. Unique identification codes were assigned to participants to maintain anonymity. For the Gambo Sawaba session, the center was designated as C1, with participants coded as P1 to P10. Similarly, for the Babbar-Ruga session, the center was coded as C2, with participants represented as P1 to P12. The two FGD sessions were conducted, one for each center, with each session lasting approximately 60-90 minutes. Data obtained from the study were coded thematically based on the research objectives of the study.

Ethical approval for the study was obtained from the Directorate of Research, Innovation, and Partnerships (DRIPs) of Redeemer's University. Also, written consent was requested from the two centers. Furthermore, informed consent was obtained from each participant after a full explanation of the study's purpose, procedures, potential risks, benefits, and the right to withdraw at any time without penalty. Confidentiality and anonymity were strictly maintained throughout the study. Ethical measures to eradicate bias included the use of female research assistants to

mitigate gender-power imbalances, the translation and back-translation of guides by professional linguists to ensure cultural neutrality, and the requirement of spousal/guardian consent alongside individual informed consent to respect local social structures while protecting the participants' autonomy.

3.0 RESULTS

3.1 Theme One: Knowledge, awareness, and channels used to access information about Free VVF Repair and Treatment Services.

The first question of the focus group discussion guide was aimed at extracting data on the communication channel that VVF patients make use of to get information about free VVF repair and treatment services in Northwest Nigeria. The results indicated that most of the discussants knew about free VVF repair and treatment services, which they attributed to different means of communication. The radio jingles, health programmes, and traditional means like the town criers played a key role in passing information. The family members and community health workers also facilitated access, giving detailed guidance and logistical support, therefore, making informed choices. These channels were culturally focused, especially on rural and non-literate people. The extracts of the discussion are presented below:

> My initial awareness of the free VVF repair services was from a radio jingle. It described how women with this condition may receive free assistance, which made me hopeful about receiving treatment. (C1, P4)
>
> VVF and its treatment were mentioned in a health programme on the radio. According to them, it was free, and I asked a community health worker to explain it to me further. (C1, P10)
>
> Our village was visited by the town crier, who was announcing free treatment for women affected with VVF. He gave information regarding registration, screening, and treatment centers, such as post-surgery assistance, such as meals and vocational training. (C2, P7)
>
> The head of our village knows about my condition; this is the reason why he sent me a health worker. She was there to tell me how the sickness is curable, and how free treatment and empowerment were something that excites me since I am a divorced woman. This was to be the first time I heard about free treatment. (C2, P3)
>
> It was my in-law, who came from Zaria, who informed us of the free treatment. I had to wait for my husband to permit me to go.

> He was reluctant at first, but he brought it. (C1, P5)

However, another participant (C2, P2) noted that she was called from the center for screening without her knowing how they got her number. Meanwhile, yet another participant (C1, P9) noted that although she heard about the free VVF services from a survivor, she could not decide on her own. This further explains the gender role claims as part of the social norm affecting free VVF uptake.

These results reveal the suitability of radio jingles, health programmes, and traditional communication media like town criers in creating awareness, especially in rural regions. These channels were effective in motivating women to seek treatment by sending messages in their native languages and through social personalities whom they trusted. Although it must be noted that gender roles may reduce treatment seeking, as women have to wait for permission from their husbands or male figures in their family.

3.2 Theme Two: Understanding of VVF Repair and Treatment Messages.

The second question of the focus group guide aimed to produce data on the investigation of the level of understanding of the VVF repair and treatment messages among VVF patients in Northwest Nigeria. Discussants were found to have a good idea of VVF repair as a surgical operation with post-operative care, rehabilitation, and reintegration. Local language and visual aids made the messages clear, thereby breeding hope and encouraging people to seek treatment. Excerpts are shown below:

> The radio message and that of the health workers were straightforward. They claimed that free operation was available to repair VVF, and then they would recover and go back to their families. I knew it very well as it was in my language, and I decided I had to do it. (C2, P11)

> As I listened to the fact that the treatment was free and they would take care of us after the operation, I was relieved. I was optimistic since I would be glad to lead a normal life once again. (C2, P1)

> Because they spoke in Fulfulde and Hausa, I understood everything the healthcare personnel said. I was also allowed to ask questions. (C1, P5)

> When they talked about the free treatment the first time, I was able to comprehend them, but they never repeated that. So, I did not remember all the aspects until I arrived at the center. (C1, P4)

Even though the majority understood the message and showed that they recalled major messages, like the fact that the repair was free and the vocational training opportunity. A few of the participants said they still needed their

husbands to explain more. Also, others said they sought clarity, especially in the location and how to get to the center.

Thus, from the findings, it can be inferred that the Use of easy-to-understand, culturally sensitive messages in the local languages increased the understanding, especially among non-literate patients. Nevertheless, the short recurrence of messages made it difficult to retain information, and this made it necessary to communicate more regularly so that the message would be solidified.

Table 1: Communication channels used by VVF patients to Access free VVF repair information

S/N	Communication channels	Frequency of mention
1	Radio jingles/programmes	18
2	Community health workers	15
3	Family members/friends	13
4	Community leaders	10
5	VVF survivors	7
6	Direct contact from centres	5
7	Religious leaders	3
8	Town criers/ Village messengers	2

To summarize the findings, Table 1 presents the communication channels identified during the FGDs and their verbal frequency score (number of times mentioned by participants).

4.0 DISCUSSION

In the study, it was found that VVF patients received information concerning the free VVF repair and treatment through the radio, health care personnel, and family members. The radio jingles became one of the main media since they reached more people in rural regions. According to FGD results, the messages given to them were hopeful and combated the myths concerning VVF as a spiritual or hygienic problem. Local leaders and community health workers were important in providing a clear explanation and logistical assistance, including transportation. Consistent with Marcus (2021), who found radio messages effective for initial community education on VVF in Kano/Katsina, our findings confirm radio jingles and programmes as the most frequently mentioned channel (n=18). However, participants highlighted challenges in long-term retention due to limited repetition, a gap not explored in prior surveys. Nonetheless, the fact that there is minimal use of telecommunication calls and messages implies that there is a possibility to capitalize on mobile technology in terms of increasing reach even further. This is in line with the claims and the findings of the earlier research (Marcus, 2021; Didiugwu, 2017; Odoemelam & Ebeze, 2015) that radio is the most accessible and influential media in Northern Nigeria, and that radio serves as an important source of information regarding VVF.

The finding also revealed an interference of gender role in assessing information about treatment seeking. VVF patients needed to get permission from their husbands for them to be able to act on the message or engage the message they hear. The result that VVF patients need their husbands to consent to act in reaction to information seeking treatment is consistent with the Theory of Reasoned Action (TRA) in that it provides an example of the way that subjective norms affect behavioral intentions. TRA assumes that intentions are what drive behavior and are influenced by personal attitudes and social

pressures. The necessity of spousal approval, in this case, is based on the subjective norm, gender roles, in which the authority of husbands becomes the social factor that either facilitates or limits the intentions of women to address health messages and consult a physician, which directly affects their behavior.

The understanding of the messages on the repair and treatment of VVF was high due to clear, understandable, and culturally sensitive messages. According to the FGD participants, radio jingles and face-to-face conversations with the health workers and family members were simple to comprehend, especially when presented in local languages such as Hausa or Fulfulde. Also, findings determined that VVF patients could remember the messages that stressed words like VVF is treatable, free of charge, and the presence of skill acquisition after treatment. Nonetheless, a few respondents stated that they had to seek assistance in decoding the message. This goes hand in hand with Marcus (2021), who states that media such as radio are better understood when used together with interpersonal communication.

4.1 Conclusion and Recommendations

The research concluded that radio is a significant source of information in delivering messages about the free VVF treatment and services since it is a highly accessible and influential medium in rural areas of Northern Nigeria. The study also noted that subjective norms seeking consent from husbands or family members could counter treatment-seeking behavior in VVF patients. The paper concluded that the misconceptions could be overcome through health workers and family members who could encourage treatment-seeking behavior.

In conclusion, it was recommended that the following be done:

a) Government and NGO partners should expand radio jingle campaigns with local media for frequent, multilingual broadcast to highlight free VVF services and dispel myths and misconceptions about the disease.
b) Implement training programmes for health workers, community leaders, among others, to standardize culturally adjusted messaging for improved comprehension and retention.

Data Availability Statement – The datasets on which conclusions were made for this study are available on reasonable request.

Conflicts of Interest Statement – The authors declare that the research was conducted in the absence of any known personal or financial relationships that could be perceived as a potential conflict of interest.

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Authors' Credit – The authors contributed equally.

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