

Moderating Influence of Intervention Programs on the Relationships between Psychosocial factors and Therapeutic Behaviour of Obstetric Fistula Patients in North-west Nigeria: A Proposed Conceptual Framework

Faruk U. Abubakar*, Muhammad Anka Nasiru[#]

Department of Nursing Sciences, College of Health Sciences, Usmanu Danfodiyo University Sokoto, Nigeria

Abstract—The strategic objective of this study is to make available a visual framework that graphically describes some selected constructs of intervention programs, psychosocial factors, and therapeutic behavior among obstetric fistula patients in northern Nigeria. Explicitly, this study proposed a research framework that, when authenticated, it will go further to assess the seeming association among the key constructs under study. In order to offer a solution to the research problem stated by this paper, this study will, in due course, employ mixed methods research design (pragmatism). The research consists of five basic constructs in the proposed framework that, when validated, the constructs will be used to evaluate the influence of intervention programs, combined with psychosocial factors in motivating obstetric fistula women to participate in therapy. In the proposed conceptual framework, the key constructs that strive for validation comprise therapeutic behavior, intervention programs, decision-making, the attitude of health personnel, and social support.

Keywords: Therapeutic behavior, intervention programs, decision-making, attitude of health personnel, social support. Obstetric fistula

I. INTRODUCTION

Obstetric fistulas come about mainly because of prolonged obstructed labor ([35]-[39]). Labor becomes prolonged when a woman takes longer than 24 hours to deliver a child [35]. A significant complication of prolonged labor is the occurrence of birth-related injury communicating the vagina and urinary bladder (VVF or vesicovaginal fistula) or vagina and rectum (RVF or rectovaginal fistula), leading to uncontrolled escape of urine and feces through the vagina, aggressive odor, and other social, physical, medical, and psychological problems ([6], [12]-[35]).

Worldwide, obstetric fistula disease distresses more than 2-3 million women ([35]-[6]), with an estimated 50,000-100,000 afflicted individuals with the disease every year, generally in unindustrialized nations including Nigeria ([25]-[35]). In the case of Nigeria, an estimate shows that there are about 800,000-1,000,000 victims of the obstetric fistula

disease, with nearly 20,000 new cases suffering from the condition annually ([35]-[25]). Northern Nigeria alone has more than 700,000 cases of obstetric fistula, accounting for nearly 70 percent of the figure of the disease in Nigeria, with an average 2 to 5 cases occurring among every 1,000 delivery compared to 0.44 cases for every 1,000 birth in Southern Nigeria ([16]-[24]).

It is important to note, despite an enormous number of patients with obstetric fistula in Nigeria, only around 4,000-5,000 repairs were carried out each year, which further makes the disease situation worse ([16]-[24]). In recent times, a report from the Federal Ministry of Health, Nigeria, shows that the inability of most significant number of states in northern Nigeria to eradicate obstetric fistula could be related to several psychosocial factors, such as reduced health infrastructure, inadequate training of health professionals, and ignorance on the treatability of the disease on the part of the victims among others [16]. Furthermore, and more importantly, obstetric fistula may have persisted in Nigeria perhaps, because most victims of the disease were unable to try to find help from competent health professionals; which could be due to some fundamental issues, such as decision-making ([35]-[16]), attitude of health personnel [20], social support [36], and transportation [1]. Conversely, several scholars ([5]-[23]) contend that the factors mentioned in the preceding discussion are not related to the inability of the obstetric fistula patients to seek for healthcare services.

According to references[8]and [20],a moderator variable can be introduced in a study if the relationships between independent and dependent variables are inconsistent, weak or if there is evidence that previous intervention programs have not been active or are weak. Therefore, the above scenarios created a "gap" in knowledge, which will be filled by this study through the introduction of a "moderator" to strengthen the relationship between the predictors and outcome, which will be the first contribution of the subsequent study.

Based on the preceding discussion, there are few studies

([5]-[25]) that examined these six constructs (independent and dependent variables) among obstetric fistula patients in the selected states (Sokoto, Kebbi, Zamfara, Katsina, Kano, and Kaduna) in northern Nigeria. In fact, to the knowledge of this researcher, there is no single study that examines the moderating effects of intervention programs on the relationship between these psychosocial variables and the therapeutic behavior of obstetric fistula women in northern Nigeria. Therefore, this paper will widen the scope of its investigations to include more states in northern Nigeria, as shown in the preceding discussion. Additionally, based on the reviewed literature, no study has employed these constructs using mixed methods research design (pragmatism) in a single study to evaluate the reason why not many obstetric fistula women seek for therapy.

Consequently, the foremost objective of this study is to develop a proposed conceptual framework that will utilize pragmatic research orientation to connect and elucidate the moderating effect of intervention programs on the relationship between psychosocial factors and therapeutic behavior of obstetric fistula patients in some selected states in northern Nigeria. In the process, this will enhance literature, therefore, permitting the associations outside Asia, USA, Europe, some African countries, and principally Nigeria. This paper is made up of five significant sections. The first section comprises the introduction to therapeutic behavior among patients, followed by an overview of the moderating effects of intervention programs (rehabilitation and campaign) in the second section. The third section focuses on the psychosocial factors (decision-making, the attitude of health professionals, social support, & transportation) influencing therapeutic behavior. The fourth section of this paper deliberates on the proposed conceptual framework. Finally, the fifth section offers a conclusion and recommendation.

II. LITERATURE REVIEW

2.1 Therapeutic Behaviour:

Therapeutic behavior means the activities that a person or group with specific health challenges engaged in to prevent illness, promote health, and or cure particular diseases [4]. Moreover, therapeutic behavior entails action that includes commitments from the individuals who are facing apparent challenge in that the individuals ought to be ready to accept the fact that they desire to progress or treatment from the illness affecting them through the acceptance of orders from competent medical professionals to improve health or treatment [9].

Generally, the construct of therapeutic behavior represents a sick individual working together with other persons to acquire support, which could be in the form of information, therapy, and general support grounded on a particular problem a seeker brought with him[4]. This definition of therapeutic behavior by Akhter is an indication that health professionals, mainly those responsible for the care of obstetric fistula patients, are beginning to appreciate the construct as an

essential part of their way of life. Additionally, the significance of therapeutic behavior was discovered by reference [36], who contends that the health personnel must understand various psychosocial factors, and more importantly, the moderating factors which influence peoples' decision to seek therapy.

2.2 Psychosocial factors and therapeutic behavior:

The Psychosocial factors imply to those psychological and social elements that can influence the therapeutic behavior of the individuals in the society ([18]-[4]). Furthermore, the concept of psychosocial factors is also defined as essentials that could positively influence people with specific health challenges to take part in therapy. According to reference [9], among the most significant prominent perceived psychosocial factors that positively influence therapeutic behavior include but are not limited to decision-making, the attitude of health professionals, social support, and transportation.

As a result, based on the numerous definitions of the concept of psychosocial factors influencing therapeutic behavior in the preceding discussion, this study examined the influences the construct may have when combined with the moderator (rehabilitation and campaign) to motivate women who contract obstetric fistula disease to seek cure in the selected states of north-west Nigeria.

2.2.1: Decision-Making:

Decision-making entails to a situation where women and men have relatively equal chances in engagement into discussions concerning matters affecting them and the family ([11]-[23]). Women's participation in decision-making has a remarkable advantage, in that, in a society where women participate in important decisions affecting their lives and families; there are high chances of improving the health and economy of that society ([11]-[23]). Conversely, reduced decision-making power available to women may result in the violation of their health and other fundamental human rights [23].

Several studies have examined the influence of decision-making on therapeutic behavior of obstetric fistula patients ([11], [19]-[25]). For example, in Tanzania, lack of decision-making power available to women was observed to have inhibited women's participation in health intervention programs. The preceding study further observed that in most rural communities where bulk of the patients came from they could not take decisions regarding their health or that of their children. That, for the patients to seek health care services; they have to seek permission from the husband or his family, even in dire situations [19]. Furthermore, investigation by reference[16] shows that VVF disease is preventable but the problem is getting worse because majority of the rural women in Nigeria are powerless; whose fortification of rights is not sufficient but were left to face the rage of gender disparity especially while determining on when and how to access health care facilities.

Furthermore, studies that examined the impact of women's decision-making power on therapeutic behavior among patients have reported inconsistencies in their findings. So, for instance, reference [7] stated that in Nigeria, only 10-12 percent of women in northern Nigeria participate in decision-making affecting their health, compared to 50 percent in southern Nigeria. Conversely, reference [29] stated that the majority of women in Nigeria lack decision-making power to participate in treatment. Also, reference [23] reported mixed findings in their studies concerning decision-making in four nations, which reveals that that woman in India and Nepal controlled decision-making autonomy to partake in cure treatment. On the other hand, in Kenya and Namibia, the study shows that a majority of women in rural communities do not have decision-making power, which affects their participation in seeking healthcare facilities.

In line with the previous studies, reference [7] in his examination of decision-making as a factor that inhibits seeking for healthcare services suggested further studies to focus on how problem of decision-making affects participation in health intervention programs in another social context, as well as the necessity for evaluating the development in health inequalities in such new environments. Again, the majority of the previous studies employed either qualitative or quantitative methods to examine decision-making, which creates a methodological gap, which can be filled using mixed-method research design, in line with the views of references [14] and [28].

Thus, this study employed decision-making as one of the study's construct to discover its relationship with therapeutic behavior among obstetric fistula in the direct relationship, and to combine the construct with intervention programs (moderator) in the indirect relationship. The essence of examining the direct and the indirect relationship is to evaluate the constructs within the context of some selected states in northern Nigeria because this author believes there is a paucity of empirical evidence in previous studies. Thus, this study hypothesized that:

H1: Decision-making is positively related to therapeutic behavior among obstetric fistula patients in northern Nigeria.

H2: Intervention programs moderate the relationships between decision-making and therapeutic behavior among obstetric fistula patients in northern Nigeria.

2.2.2 Attitude of Health Personnel:

The term attitude of healthcare personnel signifies the behavior of health workers exhibited towards the patients; the behavior could be positive or negative [21]. The positive behavior of the healthcare personnel embraces showing to the patients' kindness, respect, and politeness among others [20]. On the contrary, the negative attitude of health personnel is presented to the patient by way of verbal abuse, contempt, showing lack of empathy and sympathy, physical assault, and inadequate attention to confidentiality among others [20].

Moreover, the construct of the attitude of health personnel involves relating with the patients through being friendly, respectful, and polite, among others ([20]-[26]). On the other hand, the concept involves behaving negatively towards the patients in a manner that depict staff as being cruel, abusive, and rude as well as staff discharging their duties without fairness [26].

The attitude of healthcare personnel as a concept is essential for a positive attitude aids to promote interpersonal communication among the patient and the healthcare providers; this ultimately helps to offer quality healthcare facilities to the sick persons [20]. On the other hand, the negative attitudes of healthcare personnel create an unhealthy gap and barrier to seeking treatment [21]. Also, poor relationships, particularly between health care providers and women patients, could hamper the transfer of information that such pregnant women may require for their healthy development and that of the unborn child ([20]-[26]). The information might include one about nutrition, family planning, pre and post-delivery preparations among others ([20]-[26]). Also, showing negative attitudes by the health personnel might result in further social and psychological injury to people with health issues; subsequently, this could have adverse consequences on their therapeutic behavior [20].

Several studies on the attitude of health personnel show some inconsistent findings. For example, a study comparing attitudes of trained staff midwives in government and private missionary hospitals in Oyo, Nigeria, reported contradicting findings [2]. The result of the study shows that because of the staff's positive attitude in the private missionary hospital, women frequently visit the clinic for delivery: although the clinic is not well equipped [2]. Conversely, the study found that because of the staff's negative attitude in a government hospital, only a few people visit the clinic for delivery. The decline in participation at the health center happened even though the government hospital is more equipped than a private missionary hospital. What is perplexing is that these staff received training at the same school, so the inconsistency is baffling [2]. Additionally, reference [18] indicated that negative staff attitude prevents the participation of pregnant women in treatment in rural Pakistan.

Furthermore, a study in some selected Zambian hospitals utilizing 86 sampled women for antenatal care, labor, and those undergoing abortion indicated that the attitude of most of the healthcare providers in the area is positive [22]. Similarly, a study in Bangladesh suggests that health personnel attitude is right because the workers continually assess the health conditions of the sick in the hospital; they serve medicine at the right time and sometimes offer financial assistance to the clients [3]. Similarly, a study in four South African regions using 187 sample size reports that over 65 percent of the respondents reported that they visit the antenatal care unit to seek for treatment because the health workers are friendly [33]. Again, the respondents stated that anytime they are visiting the health center, they feel relaxed

and less pain because health workers interact with them politely using good and reassuring questions. Also, the study shows that patients who experienced a positive attitude while in contact with health workers are more likely to come back for follow up care [33]. Also, a study in the Ashanti region in Ghana hospitals suggests that health workers providing HIV/AIDS services to clients demonstrated positive attitudes and behaviors, in that, health personnel received patients into the center warmly, speaks to the patients with respect, advise the sick on several matters and they offer monetary help to the patients [21].

Based on the preceding argument, the reviewed literature provided some gaps for further research. First, the examination of the concept of the attitude of health personnel by the previous studies was mostly qualitative driven, which emphasizes on understanding the lived experiences of the partakers; therefore, the studies cannot be generalized to the universe, this assumption is in line with the opinions of reference [27]. Concerning the preceding discussion reference [18] suggested further studies to focus on examining attitudes of health personnel through the use of surveys and interviews simultaneously. Besides, most of the studies on the attitude of health professionals ([33], [18],[21]-[3]) for instance, were piloted in Bangladesh, South Africa, Ghana, Pakistan, Zambia, and Europe. These nations are dissimilar from Nigeria in terms of culture and environment. For that reason, this study assessed the construct in a different social context amongst obstetric fistula clients in northern Nigeria. In the same way, most of the research on the attitude of health personnel utilized the concept to study illnesses and problems such as abortions, antenatal and postnatal care, HIV/AIDS among others. However, the current study examined the concepts with obstetric fistula.

Also and more importantly, the inconsistencies or mixed findings among previous studies that examined the construct of the attitude of health personnel offered justification for the introduction of moderating variables, which is in line with the opinions of [8]. Therefore, this study instituted intervention programs as a fitting moderating variable to strengthen the association between the attitude of health personnel and therapeutic behavior of obstetric fistula patients, which is in line with the views of [10]-[31]. Therefore, this study proposed that:

H3: Attitude of health personnel is positively related to therapeutic behavior among obstetric fistula patients in northern Nigeria.

H4: Intervention programs moderate the relationships between the attitude of health personnel and therapeutic behavior among obstetric fistula patients in northern Nigeria.

2.2.3 Social Support:

Social support denotes the material and emotional support provided to an individual by the fellow's family, friends and community among others ([34]-[37]). Social support is

important in that support from the family, relatives, friends among others, boosts satisfaction and psychosocial wellbeing [15]. Support from the previous ones is even more significant among women who are about to deliver in the health centers, in which the presence of their loved ones could boost the confidence and comfort of a woman, leading to reduce patient's anxiety [15]. Conversely, poor social support from family, friends, and community may lower an individual's level of confidence as well as cause damage to his/her physical and psychological well-being[37].

Several studies ([12]-[15]) have examined social support concerning therapeutic behavior among patients receiving treatment and the results show some contradictions. So, for instance, a study by reference [12] on social support, gender, and treatment-seeking behavior for substance abuse found a significant positive relationship between social support through the company of significant others and seeking treatment. Conversely, reference [15] found no relationship between social support through multiple companies of people and treatment-seeking behavior. Again, reference [15] argued that even where the relative of a pregnant woman accompanies her to the health center for delivery, the health personnel might prevent the patient's families from waiting in the ward. In some instances, nurses or ward in-charges may ask patients' families to leave; in this case, the patient feels not comfortable, thus eroding the wisdom of support [15]. In line with the preceding discussion, reference [12] suggested further studies that would add new sources of social support to the existing traditional ones, including examining support from the religious establishments, employers, philanthropist, and club support groups.

Furthermore, mixed findings among previous studies that examined social support offer justification for the introduction of moderating variables, which is in line with the opinions of reference [8]. Therefore, this study introduced intervention programs as a perceived appropriate moderating variable to strengthen the relationship between social support and therapeutic behavior of obstetric fistula patients, which is in line with the views of reference [10]. Hence, this study will examine the construct indirect relationship and indirect relationship among patients with obstetric fistula. Thus, this study suggests the following proposition:

H5: Social support is positively related to therapeutic behavior among obstetric fistula patients in northern Nigeria.

H6: Intervention programs moderate the relationships between social support and therapeutic behavior among obstetric fistula patients in northern Nigeria.

III. RESEARCH FRAMEWORK

The Literature reviewed related to the constructs of interest to this study proposed a relationship between psychosocial factors and therapeutic behavior among obstetric fistula patients. Precisely, earlier studies ([7],[11],[23],[18],[29],[33], [3],[12],[21],[15]-[36])

hypothesizes the direct relationships between decision-making, attitude of health personnel, and social support, as seeming factors that influences therapeutic behavior as specified in figure 1. Likewise, the scholars hypothesized the moderating effects of intervention programs on the relationships between the predictors (decision-making, the attitude of health personnel & social support), and the outcome (therapeutic behavior). Additionally, the theory of planned behavior (TPB) and the health beliefs model (HBM) made assumptions concerning direct and indirect associations between the constructs of the study. In the direct relationship, the TPB suggests that the more favorable the attitude (A), subjective norms (SN) and perceived behavioral control (PBC) the robust the therapeutic behavior among obstetric fistula patients. On the contrary, the less favorable the individual's attitude to seek for a cure, the less favorable the opinions of significant others and the less than individual beliefs about their abilities, power, and control over the search for medical help the lesser the patients seek for therapy. Furthermore, in the indirect relationship, the HBM argues that the threat of disease and perceived benefits of therapy push the individual patients to address psychosocial factors, utilize appropriate intervention programs, which further boost therapeutic behavior.

Consequently, as soon as the five adapted constructs proposed by this framework (as shown in figure 1), are validated in this study, they will be employed for further study in a new social context in northern Nigeria. Also, the successive study will use a robust methodological orientation (pragmatism) and method (quantitative and qualitative) as well as the introduction of a moderator (intervention programs) in a single study in order to assess the influence of a moderator when combined with psychosocial factors in strengthening the therapeutic behavior of vesicovaginal and rectovaginal fistula patients in northern Nigeria.

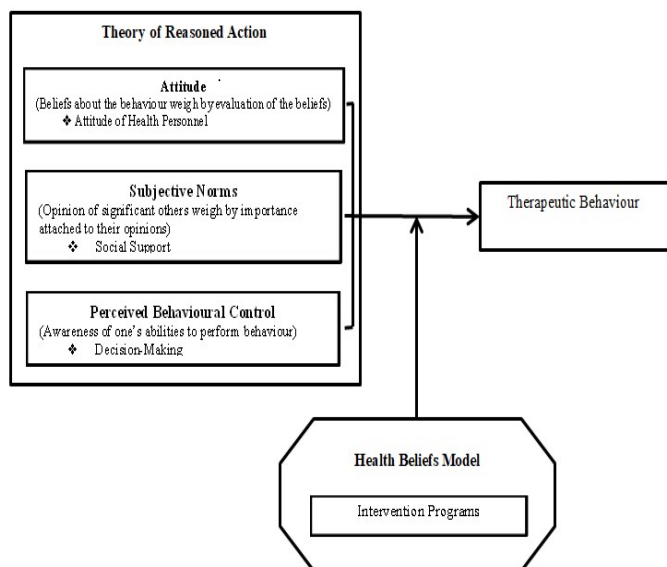


Figure 1: Proposed Conceptual Framework

IV. CONCLUSION AND RECOMMENDATION

Finally, this study intended to assess and validate the constructs on the subject of moderating effects of intervention programs on the relationships between psychosocial factors and therapeutic behavior among the obstetric fistula patients in northern Nigeria. Meanwhile, this study has provided a theoretical framework that could serve as a model for reference to researchers that aspire to carry out a study in the future concerning how intervention programs combined with psychosocial factors could strengthen medical help-seeking among patients with obstetric fistula in Nigeria. As a result, when this proposed conceptual framework is endorsed, its results will make available critical contributions to literature for policymakers on health, health practitioners and researchers among others to make the right decisions for the overall improvement of human society.

For the time being, the drawback of the other conceptual framework of this study is its inability to include a mediating relationship coupled with its use of few psychosocial variables. Consequently, the study recommends that mediators and additional psychosocial variables be included in the existing model for more authentications.

ACKNOWLEDGMENT

These researchers wish to thank their families who motivated them to reach this height; we want to say immense thanks to all.

REFERENCES

- [1] Adedini, S.A., Odimegwu, C. Bamiwuye, O., Fadeyibi, O. & Wet, N. D. Barriers to accessing healthcare in Nigeria: implications for child survival. *Global health actions*. 2014; 4(7), 102-111
- [2] Adeyemo, F. O. Comparative analysis of health institutions on attitude and practice of midwives towards pregnant women during child delivery in Ogbomosho, Oyo state, Nigeria. *IOSR journal of nursing and health science*, 2013; 1(3), 14-19.
- [3] Afsana, K., & Rashid, S. The challenges of meeting rural Bangladeshi women's need in delivery care. *Reproductive health care matters*, 2017; 9(18), 79-89.
- [4] Akhter, S. Maternal health care seeking behaviour of women from lower and socio economic groups of Dhaka, Bangladesh-fear or fusion? Doctoral (PhD) dissertation thesis. 2015.
- [5] Alio, A. P., Mervel, L., Roxburgh, K., Clayton, B. H., Marty, P. J., Bomboka, L....&Salisu, H. M. The psychosocial impact of vesicovaginal fistula in Niger. *Arch gyenecol obst*, 2011; 284, 371-378.
- [6] Baba, S. B. Birth and Sorrow: The psychosocial and medical consequences of obstetric fistula. *International Journal of Medical Sociology and Anthropology*, 2014; 2(2), 055-065.
- [7] Bankole, A. Glida S., Friday, O., Collins I. &Rubina, H. Barrier to safe motherhood in Nigeria, Guttmacher institute. New York. 2009.
- [8] Baron, R. M. & Kenny D. A. The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 1986; 51(6) 1173-1182.
- [9] Behrami, M. A., Afashbahar, O., Shakahifar, M. &Montazeri, F. R. Developing a valid tool of treatment seeking behaviour survey for Iran. *Journal of novel applied sciences*, 2104; 3(6), 651-660.

- [10] Bellows, B., Bach, R., Baker, Z. & Warren, C. Barriers to obstetric fistula treatment in low-income countries: A systematic review, Population council. 2014.
- [11] Bleich, S. N., Jarlenski, M. P., Bell, C. N., & Laveist, T. A. Health inequalities: Trend, progress, and policy. *Annu Rev public health*, 2013; 33, 7-40.
- [12] Borgman, R. & Akin, J. Social support, gender, and treatment-seeking behaviour for substance abuse: does social support influence treatment attendance among substance abusing women and men. *Discovery; Georgia state honours college undergraduate research journal*. 2012; 1(13), 335-351
- [13] Campaign to end fistula. What is fistula? 2016; 1-34
- [14] Creswell, J. W. *Research design: Qualitative, quantitative, and mixed methods approaches*, Sage publication, Lincoln. 2014.
- [15] Dunne, C. L., Fraser, J., & Gardner, G. E. Women's perceptions of social support during labor: development, reliability and validity of the birth companion support questionnaire. *Journal of midwifery*, 2014; 3(36), 1-6.
- [16] Federal Ministry of Health. National Strategic Framework for the Elimination of Obstetric fistula in Nigeria, 2011-2015, 2012; 7-20.
- [17] Frazier, P. A., Barron, K. E. & Tix, A. P. Testing moderator and mediator effects in counselling psychology research. *Journal of counselling psychology*. 2004; 51(1), 115-134
- [18] Furqan, B. I., Bismah, B. I., & David, A. S. Barriers to accessing surgical care in Pakistan: Healthcare barriers model and quantitative systematic review. *Journal of surgical research*, 2012; 176, 84-94
- [19] Gebresilase, Y. T. A qualitative study of the experience of obstetric fistula survival in Addis Ababa, Ethiopia. *International journal of women's health*, 2014; 6, 1033-1043.
- [20] Holmes, W. & Goldstein, M. "Being treated like a human being": Attitudes and behaviours of reproductive and maternal health care providers, 2012.
- [21] Jonathan, M. D. Attitude and behaviours of health workers and use of HIV/AIDS health care services. *Nursing research and practice*, 2016; 1-9.
- [22] Mannava, P., Durrant, K., Fisher, J., Chersich, M. & Luchters, S. (2015). Attitudes and behaviors of maternal health care providers in interactions with clients: a systematic review. *Globalization and health*, 2015; 11(36), 1-17.
- [23] Namasivayam, A., Osuvra, D. C., Syed, R. & Antai, D. (2012). The role of gender inequities in women's access to reproductive health care: a population-level study of Namibia, Kenya, Nepal, and India. *International journal of women's health*, 2012; 4, 351- 364.
- [24] Newswatch VVF prevalence soars in Nigeria. 2013, pp. 3-4
- [25] Odu, B. K. The impact assessment of vesicovaginal fistula among women in developing countries: A case study of northern Nigeria. *International journal of academic research and reflection*. 2013; 1(3), 1-7.
- [26] Olaogun, O. O. Attitude of health care workers, Blogs. Harvard university. 2013.
- [27] Pearce, L. D. Mixed methods inquiry in sociology. *American journal of behavioural sociology*, 2012; 56(6), 829-848.
- [28] Sekaran, U., & Bougie, R. *Research methods for business: A skill building approach*, 6th edition, United Kingdom: John Wiley & Sons Ltd. 2013.
- [29] Shamaki, M. A. & Buang, A. Sociocultural practices in maternal health among women in less developed economy: An overview of Sokoto state, Nigeria. *Malaysian journal of society and space*, 2014; 10(6), 1-14.
- [30] Siddle, K., Mwambingu, S., Malinga, T. & Fiander, A. (2013). Psychosocial impact of obstetric fistula in women presenting for surgical care in Tanzania. *International gynecol journal*, 2013; 24, 1215-1220.
- [31] Sina, O. J., Jegede, L. I. & Kunle, A. M. Socio-economic status and utilization of healthcare facilities in rural Ekiti, Nigeria. *Standard research journal of medicine and medical sciences*, 2014; 2(1), 1-43.
- [32] Tanzim, J. A. Dimensions of gender inequality and its impact on society. University of Dhaka. 2011.
- [33] Tlebere, P., Jackson, D., Loveday, M., Matizinta, L., Mbombo, N., Doherty, T... & Chopra, M. Community-based satisfaction analysis of maternal and neonatal care in South Africa to explore factors that impact utilization of maternal health services. *Journal of midwifery women's health*, 2007; 52(4), 342-35.
- [34] Upton, D. & Upton, P. Friends, and social support: psychology of wound healing. 2015, pp. 56-61
- [35] Wall, L. L. (2012). Overcoming phase 1 delays: the critical components of obstetric fistula prevention programs in resources-poor countries. *Wall BMC pregnancy and childbirth*, 2012; 12(68), 1-13.
- [36] Woldeammanuel. Factors contributing to the delay in seeking treatment for women with obstetric fistula in Ethiopia. Doctoral (PhD) thesis. 2012
- [37] Yadav S, Perceived social support, hope, and quality of life of person living with HIV/AIDS: a case study from Nepal. *Quality of life research*, 2010.