

CONTRIBUTING FACTORS TO TREATMENT-SEEKING AMONG VESICOVAGINAL FISTULA WOMEN IN NIGERIA: A PILOT STUDY

Muhammad Anka Nasiru

College of Law, Government and International Studies
Universiti Utara Malaysia, 06010 Sintok, Malaysia
Email: naslive2@yahoo.com.

Abd Halim B. Ahmad

College of Law, Government and International Studies
University Utara Malaysia, 06010 Sintok, Malaysia

Nuarrual Hilal Bin Md. Dahlan

College of Law, Government and International Studies
University Utara Malaysia, 06010 Sintok, Malaysia

ABSTRACT

The key objective of this study is to examine a small number of sample data through quantitatively on the contributing factors to treatment-seeking behavior among Vesicovaginal Fistula (VVF) women in Nigeria. Utilizing survey design, this study collected 100 usable questionnaires via simple random sampling method. The framework of this paper consists of six measurement constructs. Therefore, reliability and validity of the instruments were analyzed with SPSS software v20 and inspection by panel of experts. Results of pilot study confirmed that all the six adapted constructs are valid and reliable.

Keywords: *contributing factors, treatment-seeking, vesicovaginal fistula, pilot study, Nigeria*

Introduction

The term vesicovaginal fistula (VVF) is a childbearing related injury in which a woman sustain an abnormal communication between the urinary bladder and vagina, which is characterized by physical, medical and psychological features and consequences (FMOH, 2012, & Odu & Clealand, 2013). Worldwide, VVF affects approximately 3 million women (Wall, 2012, & Odu & Clealand, 2013), with almost 100,000 cases occurring yearly, especially in low income countries like Nigeria (Wall, 2012). In Nigeria, studies suggest that about 1,000,000 women might be suffering from VVF, with about 20,000 fresh cases occurring annually (Odu & Clealand, 2013). Failure to eradicate VVF in less privilege countries might be due to inability of most disease women to seek for competent medical help because of some contributing factors, which are both external and internal (FMOH, 2012, & Wall, 2012).

Recently, the Nigerian federal ministry of health in its national agenda for VVF eradication 2011-2015, indicated that in spite of numerous efforts made by the state to eradicate VVF, the prevalence rate of the disease remains extraordinary high. In that, despite efforts made by government through focusing attention on women access to equal opportunities, reducing poverty, promoting access to education among women, upgrading health care institutions and so forth, the rate of women affected by VVF disease is increasing, maybe due to other several contributing factors that negatively affect treatment-seeking behaviour of women in Nigeria (FMOH, 2012). The contributing factors might include disparity in decision-making practice, inadequate social support, stigmatization, bad attitude of health workers and so forth (FMOH, 2012).

There are numerous studies that examined contributing factors to treatment-seeking behavior and have found some inconsistencies in their results. So for example, studies by Borgman (2012) and Dunne et al. (2014) regarding poor social support, especially as it affects women who visit hospital for delivery, shows discrepancies in their findings. Furthermore, studies by Bleich, Jarlenski, Bell, & Laveist (2013), Namasivayam, Osuvra, Syed, & Antai (2012) concerning poor decision-making to participate in health care among women in four countries namely, India, Nepal, Kenya and Namibia and another study in Nigeria and they have found inconsistent results. Similarly, study relating attitudes of skilled staff midwives in private and government missionary hospitals in Oyo, Nigeria reported inconsistent findings. Results show that there is a positive relationship between staff attitude at the private missionary hospital and women attending the clinic for delivery. Additionally, studies relating to stigma and its influence on treatment-seeking behavior of women by Siddie Mwambungu, Malinga, Fiander (2013), Muleta (2008) and Mizck & Russinova (2015), Gharoro & Agholor (2009) reported mixed results in their findings. Similarly, studies (FMOH; 2012 and USAID, Fistulacare & Engenderhealth, 2014) have shown that previous intervention programs have not been effective: considering failure rates of the programs and high backlog of unrepaired VVF women and overall high number of existing cases in Nigeria.

Based on the review of the foregone studies, several studies have suggested directions for future researches. So for example, Borgman (2012) suggested for future studies that would add other sources of social support to the existing traditional sources of

social support, such as support from siblings, employers; religious organizations; philanthropist, and club support groups. Moreover, Bleich et al (2012) suggested a inquiry that would focus on the role of poor decision-making and its effect on participation in health programs in other cultural settings. Second, the prospective study should also focus on as continuous evaluation of progress related to health inequalities. Similarly, Furqan et al (2014) have recommended the need for further study that will focus on quantitative views of respondents about attitude of health workers so as to have wider opinion of the problem and permits for statistical generalization. Additionally, Boer et al (2012) and Bellows, et al. (2014) suggested for further research to focus on ways to reduce stigma and how reducing stigma would improves community support and treatment seeking behaviour. Finally, Bellows, et al. (2014) proposed for inclusion of perceived appropriate intervention programs such as awareness campaign through radio and educational pamphlets, which might encourage treatment-seeking behavior of VVF women. Second, the study also suggested for effective documentation of evaluation programs implemented for addressing factors that may slow down participation of women in treatment.

Taking into consideration the various explanations on the perceived issues influencing occurrences of vesicovaginal fistula in developing societies, this researcher was inspired to conduct pilot study in order to test the selected measurement instruments to ascertain their reliability and validity before utilizing them in the main study. Thus, apart from the introductory part in section one, section two of this study discusses relevant literature review; this is followed by research methodology in section three. Furthermore, section four presents the results of pilot study, which was followed by discussion and conclusion of the study in section five.

Literature Review

The concept of contributing factors to treatment-seeking refers to those factors that could serve as impediment to the desire by sick persons to attain competent health care services within a given community (FMOH, 2012 & Furqan et al. 2012). Additionally, contributing factors to treatment implies to those issues, which could obstruct the wellbeing of the sick by stopping such person from participating prevention and treatment of diseases, including but not limited poor decision-making power available to women, lack of social support, poor transportation, lack of finance, attitudinal problems of health care providers, poor health services and so forth (Wall, 2012 & DSM-IV-TR, www.https://insu.educourse/sw/840).

The term treatment-seeking behavior refers to the activities engaged by a person or group of persons who believe that they have some sickness and or disease, with the intent that such activities could assist toward improving their health, removing misfortune and or attaining relief from some form of physical, social or psychological trauma that such person(s) might have experienced (Behrami, et al. 2014) The actions also inferred that the sick individuals are ready to admit that they desire an improvement and or cure of the disease affecting them, through abiding by instructions of those persons upon whom they seeks cure of sicknesses or challenges from (Behrami, et al., 2014). Additionally, the notion of treatment seeking behaviour is defined as a situation in which a person actively and deliberately seeks for professional assistance from personnel such as nurses, doctors, midwives, social workers, NGO's and other related health care providers with a view to improving health or cure (Akhter, 2015). In principle, the term mainly means a sick individual who is reaching out to other people to get support, which could be in the form of advice, information, cure, and general support resulting from on a given problem a seeker might have brought with him (Akhter, 2015).

Poor social support is defined as absence of practical and emotional backing to a person by family and family, particularly for persons facing health challenges (Yadav, 2010 & Upton & Upton, 2015). The absence of social support from love ones such as family, friends and immediate community could result to adverse effects, which invariably may lower the affected individuals self-confidence and perhaps physical and psychological complications (Yadav, 2010). Conversely, social support may enhance the psychosocial health and satisfaction of the affected person. This is even more significant among women who are about to deliver in the health center: in which the presence of love ones would enhances a woman's self-confidence and feeling of comfort, thus, easing of anxiety related to childbirth (Dunne, Fraser, & Gardner, 2014). Additionally, in a study by Borgman (2012), to establish influence of social support on treatment seeking, suggested for further studies that would add other sources of social support to the existing traditional sources of social support for women on delivery and those with birth related complications, as well as assessing their effectiveness in encouraging participation to treatment. The new sources of social support to be added to the current study based on Borgman (2012) suggestions include support from siblings. Employers; religious organizations; philanthropist, and club support groups.

Poor decision-making is defined as the differential and discriminatory treatment of women by men in ways that are unfair, avoidable and unnecessary to the level that women becomes less involved in policy making and or discussion, which affect them and the families in society they live, particularly resulting to poverty and childbirth diseases following reduced participation in health care services (Namasivayam, Osuvra, Syed & Antai 2012 & Bleich, Jarlenski, Bell, & Laveist 2012). In Tanzania, lack of decision-making power available to women was isolated as both a predisposing factor and a barrier to intervention for women to seek treatment. In most rural communities; where bulk of the diseased women came from they cannot make decisions concerning their health and or that of the rest of the family: for them to seek for cure in hospitals they have to seek permission from the husband or his family even in dire situations (Gebresillase, 2014). Furthermore, women's participation in decision-making has tremendous advantage. In essence, where women are involved in important decisions affecting their lives and families, it assists in improving the health and economy of society (Tanzim, 2011). One major way they do so is through participating in decision to seek for health services especially care that involves her health and that of the children (Namasivayan, et al, 2012 & Bleich, et al. 2012) Furthermore, investigation by end fistula campaign organization shows that VVF disease is avoidable but situations are worsening perhaps because majority of rural women in Nigeria are powerless in societies, whose protection of rights is not adequate but left to face the wrath of gender inequality particularly in the process of trying to make ultimate decision on how to access health services (<http://www.endfistula.org>). Additionally, Bleich et al. (2013) examined health inequalities as a

consequence of widespread existing determinants of treatment seeking and have suggested for further studies to focus attention on how problem of decision-making affects poor participation in health programs in other social context, as well as the need for evaluating the progress in health inequalities in such new environments.

Attitude of health personnel is defined as behaviour of health workers manifested towards the sick, which might be positive or negative behaviour (Olaogun (2013) The positive aspect of behavior that is exhibited by health workers might be characterized by displaying kindness, respect, politeness, being friendly and so forth towards the sick. Conversely, negative attitude of health worker towards client might be through being cruel, abusive, rude, and discharging duties without fairness towards the patients, lack of empathy and sympathy, physical assault poor attention to confidentiality and so forth (Holmes & Goldstein, 2012). Additionally, attitude of health care personnel is significant because positive attitude goes a long way in promoting communication between the sick and provider of health services, which may likely assist in providing optimal qualitative health care services. Conversely, negative attitude of health personnel might create an unhealthy gap and barrier to seeking treatment (Holmes, et al. 2012). Moreover, poor inter personal relationship mainly between health care providers and women might hamper the transfer of information that pregnant women may require for their healthy development and that of the unborn child (Furqan et al. 2014). The information include: knowledge about nutrition, family planning, preparation before and after delivery, and so forth. The display of bad attitude may lead to psychological damage to the women, which may have far reaching consequences on treatment-seeking (Holmes, et al. 2012). In a latest development, the officer in charge of VVF center Abakalaki, Nigeria, Professor Sunday Adeoye suggests that several determinants influence women's behaviour to seek for treatment in Nigeria, one such recurring determinant might be the negative attitudes health workers demonstrate towards women seeking for treatment, perhaps because most of the women come from village (Anioke, 2014). Additionally, in a study of barriers to accessing surgical care for VVF women in Pakistan, Furqan et al (2014) suggested need for further study to focus on quantitative insight of respondents about attitude of health care providers in order to attain broader view of the problem and permits for generalization.

Stigma is defined as feeling of shame or disgrace by a person or persons facing certain difficult situation. Stigma leads to prejudice and discrimination (Mizck & Russinova, 2015). In general, the term implies to showing discriminatory or negative behaviour to people based on gender, race, socio-economic status, health and so forth. Additionally, Gorman (2012), argued that historically, stigmatization has been part of many societies since the first cases of various diseases outbreak become evident in America. Some of the first diseases outbreaks include Leprosy, Polio, Typhoid fever and so forth (Gorman, 2012). The period of the outbreak saw the beginning of stigmatization and isolation of people that suffers from the outbreak, which was further characterized by labeling and rejection of persons and poor communities where such outbreaks were discovered (Gorman, 2012). Study on stigma have suggested that several VVF victims in Nigeria might have refused coming to participate in seeking for treatment perhaps due to neglect and abandonment by their husbands, family and communities, which could push women to go into isolation (Premium Times, 2015). Moreover, in their study of stigma and adherence to seeking care Boer et al (2012) and Bellows, et al. (2014) suggested for further research to focus on ways to reduce stigma and how reducing stigma would improves community support and treatment seeking behaviour.

Interventions programs is defined as combination of plans (social, economic, health and so forth) aimed at producing positive changes in the behaviour of people or cause an improvement of peoples' health (WHO, 2012). According to Federal Ministry of Health (FMOH, 2012), several governmental and non-governmental programs exist in developing societies, aimed at encouraging people, particularly women to seek for treatment just as some of these programs were employed in advanced societies in the elimination of diseases. However, in spite of several efforts made by government through various intervention programs to eradicate VVF, the disease prevalence rate remains high, perhaps because previous programs have not yielded desired results (Bellow, et al. 2014). Thus, because of the ineffectiveness of previous intervention programs in swaying women towards treatment-seeking, Bellows, et al. (2014) suggested direction for further studies. The scholars suggested for inclusion of intervention programs such as awareness campaign through radio and educational pamphlets, which might encourage treatment-seeking behavior of VVF women. Second, the study suggests effective documentation of evaluation programs implemented for removing both demand (psychosocially based) and supply (hospital facility based) aspect of factors that may slow down participation in treatment.

It is important to note that reliability assesses the degree to which a given instrument is error-free, consistent and constant across several items of the scale. Whereas, validity assesses the degree to which a given instrument is measuring what it ought to measures (Sekaran and Bougie, 2013). Because of the forgone reason, this work presents result of the pilot study regarding psychosocial determinants of treatment seeking behavior among women with VVF disease in north-west Nigeria.

Methodology

This study pays emphasis on a pilot study, in order for the researcher to clear doubts regarding validity and reliability of measuring instruments used. Similarly, outcome of pilot study through its suggestions could be integrated in the main work, and possibly review the items if need be, which is in line with recommendation of Neuman (2006). Thus, a survey research design was adapted in this study in order to examine perceptions of VVF women in Nigeria, which is in line with suggestions made by Sekaran & Bougie (2013). In a pilot study, sample used are usually small (Neuman, 2006), however it is common to raise sample to approximately 100 respondents (Creswell, 2014). Therefore, in this study a total of 105 copies of questionnaires were randomly researcher-administered. Based on the opinion of Sekaran & Bougie (2013), researcher-administered questionnaire has advantage in that it could permits researchers to gather data within short period, It is free from stress on the part of participants, and the method guarantee that contradiction in findings are escaped. Another advantage of researcher-administered questionnaire is it might provide high response rate because questionnaires are gathered immediately the researcher fill-in the response he asked the respondents (Sekaran & Bougie, 2013).

This study employed questionnaires as the main instrument of data gathering. Closed-ended questionnaire was utilized because it provides superior assistances over other instruments such as ease of coding, tabulation and analysis (Sekaran & Bougie, 2013). Closed-ended questionnaire also help respondents in making quick choice which is easier for researcher to code for onward analysis (Neuman, 2006). Furthermore, items of the questionnaires measured on five Likert-scales. From the 105 questionnaires administered by the researcher, 100 were properly completed, while 5 questionnaires have not been properly filled, as such only 100 were analyzed. The response rate of 95.2% was attained mainly because the questionnaires were researcher-administered (researcher tick responses chosen by respondents).

Table 1: MEASUREMENT INSTRUMENTS AND SOURCES

SN	Measurement Instrument	Sources	Items
1.	Poor Social Support	Dalmide et al. (2013) and Dunne et al. (2014)	7
2.	Poor Decision-Making	Namasivayam et al. (2012) and Bleich, et al. (2012)	4
3.	Negative Attitude of Health Personnel	Holmes et al. (2012) and Bourquine et al. (2015)	8
4.	Stigma	Strangal et al. (2012)	8
5.	Treatment-Seeking Behaviour	Behrami, et al. (2014)	12
6.	Intervention Programs	Keating et al. (2006) and Karki et al (2008)	21
	Total number of items		60

Sources: The Researcher

This study consist of six (6) constructs as shown in Table 1, namely poor social support, poor decision-making, negative attitude of health personnel, stigma and intervention programs, which are the independent variables. While treatment-seeking behaviour is the dependent variable. The construct of poor social support adapted in this paper has 7 items, and it was based on the original work of Dalmide, et al. (2013) and Dunne, et al. (2014). Similarly, the construct of poor decision-making containing 4 items modified in this paper was based on the original work of Namasivayam et al. (2012) and Bleich et al (2012). Moreover, the construct of negative attitude of health personnel comprising 8 items modified in this paper was based on the original work of Holmes et al. (2012) and Bourquine et al. (2015). Next, the construct of stigma comprising 8 items modified in this study was based on the original work of Strangal et al. (2012). Additionally, treatment-seeking behaviour comprising of 12 items adapted in this study was based on the original work of Behrami, et al. (2014). Finally, the construct of intervention programs containing 21 items modified in this study was based on the original work of Keating et al. (2006) and Karki et al (2008).

Results

Validity Test

Validity looks at the proof that instruments in a given study is appropriate in gauging the proposed construct (Sekaran & Bougie, 2013). In this paper, face or content validity was carried out in order to make sure that the items are valid and that it is measuring the construct it is primarily intended, which is in line with recommendations of Creswell (2014). In this study, panel of expert and small sample (105) of respondents were enquired to offer comments and give feedback on the pertinence of the items adapted to measure constructs. Experts asked include associate professors, professors at the College of Law Government and International studies, Universiti Utara, Malaysia, registered nurses and midwives, doctors, and some PhD students familiar with VVF case in Nigeria were all consulted to test the clearness of the survey instruments. Additionally, some VVF women were given the instruments for their feedback. Based on experience from the feedback some items had been re-phrased appropriately so as to measure the construct, equally be understood by respondents in the main study.

Reliability Test

Reliability test indicates the extent to which respondents' replies to the entire items used in a study are consistent (Sekaran & Bougie, 2013). Therefore, this study used SPSS to test for reliability. Among the several existing statistical methods for testing reliability, Cronbach's alpha coefficient was employed, which is in line with suggestion made by (Neuman, 2006 & Sekaran & Bougie, 2013). From the result of reliability test, it has been proven that all the six (6) constructs had a high reliability measures, which ranges from 0.84 to 0.93, which is in line with the recommendations that a Cronbach's alpha coefficient threshold should be 0.70 or greater demonstrating that the instrument possesses high reliability (Sekaran & Bougie, 2013). Table 2 indicates the summary of the reliability results. It is evident that results of pilot study had showed Cronbach's alpha values for the six (6) individual constructs under study, which are all above 0.70. Thus, given the established benchmark of 0.70, it can be decided that all the constructs are reliable; as such there was no need for removing any item.

Table 2: Reliability Test Result

SN	Constructs	Number of Items	Cronbach's Alpha
1	Poor social support	7	.88
2	Poor Decision-Making	4	.85
3	Negative Attitude of health personnel	8	.84
4	Stigma	8	.92
5	Treatment Seeking behavior	12	.85
6	Intervention programs	21	.93
	Total	60	

Sources: The Researcher

Moreover, Table 3 shows the descriptive analysis of respondent's characteristics.

Table 3: Characteristics of Respondents

Demographic variables	Categories	Frequencies	Percentage %
Educational Level	No formal Education	80	80.0
	Primary School	4	4.0
	Secondary School	2	2.0
	Diploma	2	2.0
	Did not graduate	12	12.0
	Total	100	100.0
Occupation	Employed	10	10.0
	Unemployed	86	86.0
	Housewife (fulltime)	4	4.0
	Total	100	100.0
Income	Below N6000	84	84.0
	N7000-N10000	8	8.0
	Above N18000	8	8.0
	Total	100	100.0
Operation	Yes	68	68.0
	No	32	32.0
	Total	100	100.0
Awareness	Yes	80	80.0
	No	20	20.0
	Total	100	100.0
Help	Yes	74	74.0
	No	26	26.0
	Total	100	100.0
Teaching	Yes	80	80.0
	No	20	20.0
	Total	100	100.0
Advice	Yes	74	74.0
	No	26	26.0
	Total	100	100.0

Sources: The Researcher

With regards to educational level of respondents, Table 3 shows 80(80%) respondents do not possess formal education; 4(4.0%) respondents attended primary school; 2(2.0%) respondents attended secondary school; 2(2.0%) respondents have diploma, and 12 (12.0%) respondents did not graduate. By implication, majority of respondents are illiterates, as such it is recommended that in the main study, designed questions should take account of this weakness (illiteracy), so as to plot majority of questionnaires using local language of the respondents for easier comprehension. Furthermore, with regards to employment, Table 3 indicates that 10(10.0%) respondents are employed; 86(86.0%) respondents are unemployed, and 4(4.0%) respondents are full housewives. This data reveals that majority of VVF women are unemployed, by implication, main study might need peruse main causes of unemployment. Additionally, with regards to various intervention programs 68(68.0%) respondents had VVF operation; whereas 32(32.0%) were not operated. Also, 80(80.0%) participated in awareness campaign, while, 20(20.0%) respondents did not participated. Regarding Help offered to train women for various skills, 74(74.0%) received training, while, 26(26.4%) did not receive training. Likewise, concerning teaching, 80(80.0%) respondents participated in teaching, whereas, 20(20.0%) respondents did not take part in teaching. Moreover, regarding advice 74(74.0%) respondents received advice, whereas 26(26.0%) respondents did not. This data shows that majority of VVF women have participated in intervention programs, therefore, by implication, it indicates that possibly in the core study, intervention programs could be a significant factor towards boosting participation of VVF women to seek for competent health care.

Discussion, Conclusion and Limitation

As mentioned in the preliminary part, the main objective of this paper is to test reliability and validity of measurement instruments in order to make sure that the instruments are flawless before utilizing same in the main study. Therefore, based on the stated objective the findings of the paper are in agreement with the overall aims of the study. Specifically, validity was attained because respondents have demonstrated a good understanding of the questions they were asked, which was made possible following intense scrutiny of the questionnaire by panel of experts and consequent responses obtained from the 100 respondents in the pilot study. Equally, reliability of the instruments was tested using Cronbach's alpha coefficient. Result of reliability test shows that all the constructs are above the benchmark of 0.70. Specifically, the Cronbach's alpha result obtained ranges from 0.84, which is the least score to 0.93, which is the highest. Based on the foregone result, it can be concluded that validity and reliability of the instruments have been achieved, therefore, are safe to be utilized in the main study. In terms of limitation, the main drawback encountered in this study has to do with the considerable time than the usual 20-30 minutes the researcher had spent trying to translate to the respondents the researcher-administered questionnaire from English language to the local language (Hausa) of the majority of the respondents. Therefore, based on the fore gone limitation, this paper suggests that the services of qualified translator(s) be sought in order to translate the researcher-administered questionnaire developed in English language to Hausa language before it could be used in the main study.

References

- Adedini, S.A., Odimegwu, C. Bamiwuye, O., Fadeyibi, O. & Wet, N. D (2014). Barriers to accessing healthcare in Nigeria: implications for child survival. *Global health actions*. DOI: 10.3402/ghana.v7.23499
- Adeoye, I. S., Egwu, N. & Adeoye, J. (2014) Subsequent Childbirth among obstetric fistula survivors with unrepaired fistulas in south eastern Nigeria. *Journal of Women's Health care*, 3(5), 3-5. Retrieved from: <http://dx.doi.org/10.4172/2167-0420.1000174>
- Akhter, S. (2015) Maternal health care seeking behaviour of women from lower and upper socio-economic groups of Dhaka, Bangladesh-fear or fusion? Submitted in fulfillment of the requirements for the degree of doctor of philosophy (PhD), school of economist, Flinders University, Adelaide, Australia.
- American Sociological Association (2012). *Medical sociology*. Retrieved from www.asa.org/medicalsociology
- Anioke, O. (2014) VVF center: the feats, the prospects. *The nations newspapers*. Retrieved from thenationonlineng.net/category/southeast-2/
- Behrami, M. A., Afashbahar, O., Shakahifar, M. & Montazeri, F. R. (2014) Developing a valid tool of treatment seeking behaviour survey for Iran. *Journal of novel applied sciences* 3(6), pp. 651-660. Retrieved from www.janascie.org
- Bellows, B., Bach, R., Baker, Z. & Warren, C. (2014) Barriers to obstetric fistula treatment in low-income countries: A systematic review, *Population council*. Retrieved from www.popcouncil.org
- Bleich, S. N., Jarlenski, M. P., Bell, C. N., & Laveist, T. A. (2013) Health inequalities Trend, progress, and policy. *Annu Rev public health*, 33, pp. 7-40. Retrieved from DOI: 10.1146/annurev-pubhealth-031811-124658
- Boer, I. M, Sprangers, M. A., Prins, J. M. & Nieuwerkerk, P. T. (2012). How stigma and depressive symptoms are related to adherence and virological response to antiretroviral treatment among immigrant and indigenous HIV infected patients. *Aids behaviour*, 16, pp. 1681-1689. DOI: 10.1007/s10461-011-0112-y
- Campaign to end fistula What is fistula? Retrieved from www.endfistula.org/whatisfistula
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*, Sage publication, Lincoln.
- Borgman, R. & Akin, J. (2012). Social support, gender, and treatment-seeking behavior for substance abuse: does social support influence treatment attendance among substance abusing women and men. *Discovery; Georgia state honors college undergraduate research journal*: vol. 1, article 13. Retrieved from <http://scholarworks.gsu.edu/discovery/vol1/iss1/13>
- DSM-IV-TR. Psychosocial and environmental problems Michigan University. Retrieved from [www.https://insu.educourse/sw/840](https://insu.educourse/sw/840)
- Dunne, C. L., Fraser, J., & Gardner, G. E. (2014). Women's perceptions of social support during labor: development, reliability and validity of the birth companion support questionnaire. *Journal of midwifery*, pp. 1-6, <http://dx.doi.org/10.1016/j.midw.2013.10.010>
- Federal Ministry of Health (2012) National Strategic Framework for the Elimination of Obstetric fistula in Nigeria, 2011-2015, 7-20. Retrieved from http://www.fistulacare.org/pages/da/files/5/5.4/Nigeria_National_strategy_2011-2015pdf
- Furqan, B. I., Bismah, B. I., & David, A. S. (2012) Barriers to accessing surgical care in Pakistan: Healthcare barriers model and quantitative systematic review. *Journal of surgical research*, 176, pp. 84-94. DOI:10.1016/j.jss.2011.07.046
- Gebresillase, Y. T. (2014). A qualitative study of the experience of obstetric fistula survival in Addis Ababa, Ethiopia. *International journal of women's health*, 6, pp. 1033-1043. DOI:10.2014/UWH.s68382
- Gharoro, E. P. & Agholor, K. N. (2009). Aspect of psychosocial problems of patients with vesicovaginal fistula. *Journal of obstetrics and gynecology*, 29(7), pp. 644-647. DOI: 10.1080/01443610903100609. www.amazon.de/Global-handbook-Quality-Quality-life/dp/9401791775
- Gurman, S. (2012). What can we learn from disease stigma's long history? PLSO biomedicine journals community blog. Retrieved from www.plsomedicine.org
- Holmes, W. & Goldstein, M. (2012). "Being treated like a human being": Attitudes and behaviour of reproductive and maternal health care providers, Retrieved from https://www.burmet.edu.au/.../Holmes_et_al-attitude
- Jeff, S. (2015). How to measure the reliability of your method and metrics. *Measuring u*. Retrieved from measuring.com/blog/measuring-reliability.php
- Mizck, L. S. & Russinova, Z. (2015). Intersectional stigma and the acceptance process of women with mental illness. *Women and therapy*, 38, PP. 14-30, DOI: 10.1080/02703149.2014.978211 Retrieved from <http://dx.doi.org/doi:10.1016/j.evalprogplan.2015.01.007>
- Muleta, M., Hamlin, E. C., Fantahun, M., Kenedy, R. C. & Tafessa, B. (2008) Health and social problem encountered by treated and untreated obstetric fistula patients in rural Ethiopia. *Journal obstetrica gynecology Can* 30(1), pp. 44-50, Retrieved from: <http://www.ncbi.nlm.nih.gov/pubmed/18.198067>
- 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*, 4, pp. 351-364. Doi:102147/UWH.532569

- Neuman, L. W. (2006). *Social research methods: qualitative and quantitative approaches* Boston, Pearson educational incorporation
- News watch (2013) VVF prevalence soar in Nigeria. Retrieved from:
<http://www.mynewswatchtimesng.com/vvf-prevalence-soar-in-nigeria>
- Odu, B. K. & Clealand, J. (2013b) Women vulnerability to vesico-vaginal fistula and contributing influence in northern Nigeria. *European journal of research in social sciences*, 1(1), pp. 1-9 Retrieved from: www.idpublication.org
- Olaogun, O. O. (2013) Attitude of health care workers, Blogs. Harvard university. Retrieved from <https://blogs.sph.harvard.edu/.../attitudeof-health-care.harvard>
- Sekaran, U., & Bougie, R. (2013) *Research methods for business: A skill building approach*, 6th edition, United Kingdom: John Wiley & Sons Ltd
- Scheppers, E., Dongen, E. V., Dekker, J., Geertzen, J. & Dekker, J. (2006). Potential barriers to use of health services among ethnic minorities: a review. *Family practice advances*. DOI: 10.1093/fumpra/cmi113, 231, pp. 325-348
- 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*, 24, pp. 1215-1220. DOI: 10.1007/s00192-012-1994-6
- Tanzim, J. A. (2011). *Dimensions of gender inequality and its impact on society*. University of Dhaka. Retrieved from www.academia.edu/6663453/dimensions-of-gender-inequality
- Upton, D. & Upton, P (2015). Friends, and social support: psychology of wound healing. Retrieved from linl.springer.com/chapter/10.1007/978
- Waalwijk, K. (2010). National VVF project: Nigeria evaluation report xi, first half 1997, Katsina, kano, Sokoto, Birnin Kebbi and Maradi. Retrieved from www.isofs.org/wp-content/uploads/2014/report_011_1997
- Wall, L. L. (2012) Preventing Obstetric fistula in low-resource countries: Insight from a Haddon matrix. *Obstetric and gynecological survey*, 69(2), 111-121. Retrieved from: www.obgynsurvey.com
- Woldeamanuel (2012) Factors contributing to the delay in seeking treatment for women with obstetric fistula in Ethiopia A thesis submitted in accordance with the requirements for the degree of Masters of public health, university of South Africa. Retrieved from www.uir.unisa.ac.za
- Yadav S, (2010). Perceived social support, hope, and quality of life of person living with HIV/AIDS: a case study from Nepal. *Quality of life research*, Doi: 10.1007/s11136-009-9574