

Exploring the perception of women attending Nyagatare Health District, in Rwanda on abortion as one of family planning methods

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Abstract

This paper is focusing on abortion issue in Rwanda particularly the view of population living in Nyagatare District to the abortion. In this study, a quantitative descriptive design with a positivist paradigm guided the whole research process. Two levels of sampling were done. The first was random sampling for the selection of healthcare centres where five healthcare centres were selected out of a total of eighteen. The second level was probability sampling with a systematic strategy, which was used to select the participants at healthcare centres. A total of 137 women volunteered to participate in the study and completed an anonymous questionnaire. The authorisation to carry out the research was obtained from Nyagatare District and five healthcare centres. The research was approved by the University of KwaZulu-Natal Ethics Committee. The gathered data were analysed using SPSS version 19. Among participants 12.4% wish to use abortion as family planning method. The views on abortion remain different among people.

Keywords: Family planning, Abortion, spacing of births, abortion and family planning

Introduction

Some people see abortion as killing, while others view it as part of a family planning method. Worldwide, abortion is used by 63% of women and is now available on request for about 40% of women (Bristow, 2010). Family planning is a service used to regulate the growth rate in low-, middle- and high-income countries. Many studies show that population growth is of concern for low-, middle- and high-income countries in terms of the high rate of infant mortality and maternal mortality (Thaxton, 2007; Jones, 2008; Casey et al., 2009). This impacts on the development of the countries and does not allow the achievement of socioeconomic goals as well as the Millennium Development Goals by the year 2015 (Do, 2009). Family planning is one of the solutions that can be used to address population growth. In addition, family planning is a central feature of life and health for women all over the world (Griggs, 2009). In Rwanda, the Millennium Development Goals of 2010 showed that 27% of the people in the country are currently using contraceptives (Abbott and Rwirahira, 2010). There are two types of contraception: modern and natural. Modern contraception methods can be categorised in several ways. Hormonal methods include oral contraceptives, patches, vaginal rings, intramuscular contraceptives, implants and levonorgestrel intrauterine devices. Non-hormonal methods include male and female condoms and other barrier methods, as well as copper intrauterine devices. Implants and intrauterine devices, and sometimes intramuscular contraceptives are also categorised as long-acting, reversible contraceptive methods. Surgical sterilisation is a permanent method of family planning (Tsui, McDonald-Mosley and Burke, 2010) and abortion is classified with modern one. Natural method includes abstinence, withdrawal (fertility awareness, outer course), and continuous breastfeeding (lactationalamenorrhea method) (Stacey, 2008). As a result of this, the researcher was interested to know how the population of Nyagatare District sees abortion in right of family planning method.

The following sections are literature review on abortion; methodology used to gather information regarding family planning, as well as results from respondent to the abortion.

Literature review

Abortion is considered differently in different societies in the world. Some people see abortion as killing, while others view it as part of a family planning method. Worldwide, abortion is used by 63% of women and is now available on request for about 40% of women (Bristow, 2010). Rwanda is one of the countries that consider abortion as killing. Ndikubwayezu (2009) and Nambi (2009) state that Rwanda is still listed as one of the countries where abortion is illegal and punishable under the penal code. However, abortion recently accounted for 50% of women who die from reproductive health complications. Despite the fact that abortion is illegal in Rwanda, the results of a study by Basinga, Moore, Singh, Audam, Carlin, Birungi and Ngabo (n.d.) showed that 10 out of 1 000 women aged 15-49 were treated for complications of abortion in health facilities. In health facilities, women are admitted when they experienced complications due to the incomplete or poor practice of these illegal abortions. Many of these women reported too late for assistance due to possible shame of what they did and fear of being prosecuted. If it is legal, they may come when they notice that fertilisation had occurred. This might be an indication that the number of unsafe abortions in Rwanda is even higher when it includes women who do not experience complications and women who experience complications but do not access health services (Basinga, Moore, Singh, Audam, Carlin, Birungi and Ngabo, n.d.). Mutesi (2011), a journalist, reported two cases of women arrested for abortion in Rwanda in 2011, where one of them said that she decided to abort the foetus because the man responsible had abandoned her. The second one said that she did it because it was an unwanted pregnancy. In contrast, abortion in South Africa is legal. If unintended pregnancy is assumed, the last resort is to terminate that pregnancy. In Rwanda, abortion is legal when the life of the mother is compromised or when medical examinations show that the foetus has abnormalities that would make it impossible for the baby to survive after his/her birth Mutesi (2011).

The same issue was reported by De Mora (2011) in Uruguay that abortion is not allowed but they count around 30000 cases every year for unsafe abortion. The study done by Fleissing (Furedi, n.d) estimated that 310000 accidental pregnancies occur every year in Britain which may exceed this number as the Author did not include those who conceived and did abortion; and the same Author affirmed that the abortion is the most solution to the unwanted pregnancy. As Canadian Abortion Facts states, in Canada, abortion is legal and 96% of abortion is done as buck-up to birth control as Canadian Abortion facts stats (Campaign Life Coalition, 2009), even this act is funded. However some Canadians complain on the money that is used to kill unborn babies.

The anti-abortion activists, Dorenbos and Van Vuuren (2003) are outspoken when they argue that, when considering human rights, an abortion is discrimination against the life of the unborn child. These authors add that the life of a human being is now lower than that of an animal when one takes into account how an animal is respected. If any animal species is in danger the world hastens to secure it; human beings, however, are cruelly and torturously killed in their mothers' wombs. This is remarkable when one considers the activity of an organisation such as Greenpeace who swiftly become active to save the world's endangered species (Dorenbos and Van Vuuren, 2003). The researcher is in agreement with those authors because life starts with fertilisation and continues till the person dies. In the fight against abortion, we may educate the community about the emergency contraceptive methods. We believe that such cases occur unwillingly, but with enough knowledge of family planning methods, we could reduce the rate of abortion.

The fact that the human foetus is not easily seen, weak and vulnerable is no reason to override or ignore its right to life. Because of the mental and physical immaturity of a child, care and protection is needed before as well as after the child is born. A woman's life is considered more precious and worthy than that of the foetus without any thought for the unborn innocent human being. Women have the same rights as other people but these are often seen to be in conflict with those of their unborn children as stated by Human Rights (n.d). We may not ask for rights as well as justice for ourselves while taking away the rights

of those who are most dependent and innocent. In trying times of dealing with an unwanted pregnancy, society should empathise with women as well as their unborn children, supporting them during this period so that they do not feel abandoned and alienated. The beginning of life starts at conception. None of us has an utter right to control our bodies as many abortion-rights activists proclaim. This society plays a very significant role in sustaining and saving life. Society forbids us to use our bodies to harm others or to harm ourselves. A woman does not have the right to kill or to cause harm to the unborn baby living within her womb (Human Rights, n.d). It is not acceptable, in other words, for one individual to trade off the life of another person against his or her proper social, health or economic welfare. The only case when one life can be taken legitimately is when another life is stake (Human Rights, n.d.).

Methodology

In this study, a positivist paradigm (Weaver and Olson, 2006) was used with deductive logical reasoning. This paradigm makes the assumption that there is an objective truth existing in the world that can be explained and measured scientifically (Matveev, 2002). The data from the participants was objective truths that existed among them and which can be explained and measured scientifically. The researcher was separated from entities who were the subjects of observation.

The researcher used a quantitative approach (Burns and Grove, 2005; Moule and Goodman, 2009) that allowed him to count and measure events and perform a statistical analysis of the body of numerical data. This allowed the researcher to generalise because the measurement was valid and reliable (Alasuutari, Bickman and Brannen, 2008). This approach was used because the data collected using the quantitative approach was clear and very precise and lacked ambiguity (Gilbert, 2008).

For this study, a descriptive (Keele, 2011) quantitative approach (Burns and Grove, 2005; Moule and Goodman, 2009) was used in order to understand the phenomenon under investigation. The descriptive study was chosen for this study for the simple reason that it afforded the researcher the opportunity to gain more information about the characteristics of the topic of interest (Keele, 2011).

Nyagatare District was the setting for this research. Nyagatare District is situated in the eastern province of Rwanda, bordered by Gicumbi District on the western side, Tanzania in the east, Uganda in the north and Gasabo on the southern border. Nyagatare District has 630 villages (*Imidugudu*), 106 cells and 14 sectors. The district occupies 1 741 km² of land and is inhabited by 291 452 people. The population density is 321 inhabitants per km². Nyagatare District has one hospital and 18 health centres (Nyagatare, Rukomo, Mimuli, Gatunda, Gakirage, Nyakigando, Cyondo, Muhambo, Nyagahita, Tabagwe, Ndama, Karangazi, Muhambo, Bugaragara, Kagitumba, Muriri, Rurenge and Kabuga) (DCDP, 2007).

The population of the study was women of productive age (18–49) living in Nyagatare District, Rwanda. The total population under study was 455 of those using family planning and antenatal clinics at five selected health centres (Rukomo, Rurenge, Bugaragara, Mimuli and Nyagatare). After selecting the health centres, the researcher contacted each health centre to obtain the overall number of people who come in for antenatal and family planning services. The total number found was to be 455, which made up the population size for the study.

The sample selection was performed by selecting the setting as well as selecting the participants in the study. For the selection of the setting, the research was conducted at five health centres functioning in Nyagatare District. These health centres represent 30% of all health centres in Nyagatare District, which is an acceptable number for the generalisation of the findings. The selection of health centres in Nyagatare District was made by way of simple random sampling. The researcher obtained a list of all the health centres as the site of research, allocated numbers to each health centre and then put the numbers on separate slips of paper. The researcher deposited the slips of paper in a suitable container (bowl). Thereafter the researcher pencilled in a slip and made a note of its number, and replaced the piece of

paper, shook the bowl and selected a second, and a third, and so on until five had been selected. This is called the fishbowl technique (Brink, 2006). In this technique, all health centres had an equal chance of being selected each time because the researcher replaced the previous slip selected. For selection of participants, a sample is a subgroup of the population of a researcher's interest (Kumar, 2005). At the health centres, the probability-sampling approach with systematic strategy (Brink, 2006; Kahl, 2011) was used. During the data collection period, the researcher chose women of reproductive age (18–49) who were present at health centres for family planning and antenatal services by selecting every third person. Interval (K=3) is calculated by dividing the population by the sample size.

The sample of this study was 137 participants from five health centres in Nyagatare District. The sample was obtained from 30% of the study population.

$$Sample \ size = \frac{Population \times 30}{100} \rightarrow Sample \ size = \frac{455 \times 30}{100} = 137$$

To reach this sample size, participants were selected according to inclusion and exclusion criteria. The criteria that were used were the following:

Inclusion criteria

The following women were included:

All women attending family planning and antenatal services in the age group 18–49 years old were included in this research; women attending family planning and antenatal services, who were willing to participate in research; and; women attending family planning and antenatal services, who were willing to sign the informed consent.

Exclusion criteria

Individuals with mental disabilities were excluded because of their vulnerability and inability to make decisions on their own; women younger than 18 years were excluded from the research because they were minors; women older than 49 years were excluded from this research because they were not of child-bearing age; women who were not living in Nyagatare District could not be part of the research; and woman who participated in the pilot study could not take part in the research.

Data collection

In this sub-section, the focus will be on data collection techniques and the data collection instrument.

The researcher used a self-report questionnaire (Brink, 2006) to collect the data. This technique is used to explore participants' beliefs, knowledge and thoughts on contraceptive methods they use. The same author stated that this technique is the most effective method to obtain such information, namely to direct questions at the individuals concerned. It took approximately 20 minutes to complete the questionnaire.

This study used a self-report questionnaire. A questionnaire was designed by the researcher based on the tool used by USAID (Undie and Rama Rao, 2010).

This tool was used for the contribution to global knowledge where the main aim was to prevent occurrence of pregnancy. The section modified is the section about family planning (Undie and Rama Rao, 2010). The questionnaire comprised of six sections, namely Section A: socio-demographics; Section B: perception of family planning; Section C: information source; Section D: family planning methods; Section E: reproduction; and Section F: abortion.

The questionnaire was designed in English and then translated into Kinyarwanda for participants who could not speak or understand English, thus allowing them to answer in their mother tongue. The translation was made by three Rwandan students, and then all translation were put together in order to agree on the proper, unambiguous words to use. After agreement, the final version was typed by researcher.

Validity and reliability

Validity is the way to illustrate whether the instrument is really measuring what it set out to measure or intended to measure as this shows whether the results are true. Validity is an indication of whether the research truly measures that which it intended to measure or how truthful the results are (Golafshani, 2003; Twycross and Shields, 2004; Gerhardt, 2004; Polit and Beck, 2008). Content validity is used to show the readers how the tool responds to the objective of the research interest. Twycross and Shields (2004) point out that content validity demonstrates whether the tool appears to others to be measuring what it says it does.

Reliability is dependability and consistency of a research tool used to measure a variable (Brink, 2006). There are many types such as internal consistency, stability and equivalence (Considine, Botti and Thomas, 2005). In this study, the instrument was tested and retested during the pilot study of ten women of productive age (18–49) who did not participate in the final data collection process of this study. The pilot study is an important stage for every new survey instrument. The pilot study is a small-scale preliminary study conducted before the main research with the intent to check feasibility of the instrument and to avoid waste of money and time as a result of inadequately designed research, as argued by Haralambos and Holborn (2000).

Data collection procedure

The researcher recruited one nurse at each health centre to assist with data collection. The researcher selected a qualified nurse who understood the questionnaire as intended by the researcher. Trained nurses helped participants who could not read to fill in the questionnaire. Participants dropped the completed questionnaires in boxes that the researcher made available during data collection. It took around 20 minutes to fill in the questionnaire.

The data was collected over a period of three weeks by the researcher and one nurse from each health centre assisted. The researcher then collected all the answered questionnaires from the health centres.

Data analysis

The data was analysed using the Statistical Package for Social Sciences (SPSS), version 19.0. To make data capturing and auditing easy, the data was coded. Descriptive statistics, such as frequencies and percentages, was used to synthesise the data. Basic statistics and frequencies were considered and are presented in tables or figures.

Ethical consideration

Ethical principles (Brink, 2006) have to be adhered to in all research done by students, staff or other persons. Cautious consideration to ethical issues were taken into consideration because we reside in a world with multifaceted interactions that have an impact on the health and wellbeing of the population of all nations regardless of individual or national prosperity (Harrowing, Mill, Spiers, Kulig and Kipp, 2010). The researcher made sure he protected the dignity and welfare of the participants in accordance with ethical principles. Ethical approval was obtained from the University of KwaZulu-Natal Ethics Committee. In addition, permission to conduct research was obtained from the General Director of Nyagatare District as well as the person incharge of each health centre. Ethical consideration was considered in collaborative partnership, social value, scientific validity, fair selection of study population, favourable risk—benefit ratio, independent review, informed consent, respect for recruited participants and study communities, data management as discussed by Ford, Mills, Zachariah and Upshur, 2009).

Results

Demographic data

Demographic data included age, marital status, educational background, religion, occupation, and number of children in the family. All data are presented in Table 1

Table 1 Demographic data

Demographic data	Element of demographic data	Frequency	Percentage
Marital status	Single	12	8.8
	Married	117	85.4
	Widow	3	2.2
	Divorced	5	3.6
Educational background	None	27	19.7
	Primary	85	62
	Secondary	25	18.2
	Tertiary	0	0
Occupation	Unemployed	8	5.8
	Trader	9	6.6
	Farmer	104	75.9
	Stockbreeder	4	2.9
	Public worker	9	6.6
	Private worker	3	2.2
Religion	None	9	6.6
	Christian	117	85.4
	Muslim	10	7.3
	Traditional indigenous beliefs	1	0.7

In terms of marital status, the highest number was for married women at 85.4% (n=117), widows at 2.2% (n=3), singles at 8.8% (n=12) and divorced women at 3.6% (n=5).

The educational background shows a high number of educated participants at primary level (62%, n=85), secondary level (18.2%, n=25) and uneducated (19.7%, n=27). There were no participants educated up to tertiary level.

The occupation of participants varied. Of the participants, 75.9% (n=104) were farmers, 6.6% (n=9) were traders, 6.6% (n=9) were public workers, 2.9% (n=4) were stockbreeders, 2.2% (n=3) were private workers, and 5.8% (n=8) of the women who were present during the data collection period were unemployed.

The majority of participants were Christians (85.4%, n=117), followed by Muslims (7.3%, n=10), traditional indigenous beliefs were represented by 0.7% (n=1), and 6.6% (n=9) of the participants had some other type of religion.

Abortion information

Abortion is not allowed in Rwanda. However, in the high- and middle-income countries, this is used as a family planning method. This motivated the researcher to ask the question regarding termination of pregnancy to discover the views of the participants. Table 2 presents the perceptions regarding abortion.

Table 2 Termination of pregnancy

Variables			Frequency	Percentage
Have you heard about termination of pregnancy (abortion)?		Yes	100	73.0
		No	37	27.0
View of abortion	It is a means for fertility	Yes	13	9.5
	regulation	No	124	90.5
	It is a violation of child rights	Yes	109	79.6
		No	28	20.4
Place where abortion occurs	Abortion takes place at home	Yes	99	72.3
		No	38	27.7
	Abortion takes place at	Yes	78	56.9
	traditional healer	No	59	43.1
	Abortion takes place at clinic	Yes	45	32.8
		No	92	67.2
	Abortion takes place at hospital	Yes	30	21.9
		No	107	78.1
If you could access a termination of pregnancy		Accepted to	17	12.4
service, will you use it if you became pregnant unintentionally?		use service		

In the table above, in the last row, the researcher presents the participants who would make use of the abortion service if the service were made available to them. The participants heard about termination of pregnancy (abortion) at 73.0% (n = 100); they consider it as a mean for fertility regulation at 9.5% (n = 13), as a violation of child rights at 79.6% (n = 109); they confirmed that abortion takes place at home at 72.3% (n = 99), at traditional healer at 56.9% (n = 78), at clinic at 32.8% (n = 45), at hospital at 21.9% (n = 30); then they agreed to use this method at 12.4% (n = 17) if they become pregnant unintentionally and if the they could access a termination of pregnancy service.

Discussion

Information on abortion is root of this study because it is considered to be one type of family planning method in some countries(Bristow, 2010) while others view it differently (Nambi, 2009; Ndikubwayezu, 2009). Perceptions on abortion have to be taken into account so that researchers and policy-makers can come up with strategies to educate and inform communities. When done in the backstreets, abortion takes the lives of women. Abortion in Nyagatare District was known by 73.0% of the participants and was seen as a means of fertility regulation by 27.0% of the participants; which is in line with the thoughts of some Canadians as well as South Africans(Campaign Life Coalition, 2009). However, none of participants were using it. Others saw abortion in light of violation of children's rights (79.6%). However, in high-income countries, including South Africa, abortion is seen as a family planning method. In Rwanda, as other low income countries, abortion is legally prohibited (Nambi, 2009; Ndikubwayezu, 2009).

The research participants reported that abortion usually takes place at home (72.3%), on the traditional healer's premises (56.9%), at the clinic (32.8%) and in a hospital (21.9%). The foremost place to have an abortion, as reported by the participants, was at home. Some reported that when an individual embarks on an abortion process, she leaves the house and goes into the bush so that nobody will know what happened. In Rwanda, no clinic or hospital is permitted to perform an abortion unless there is an abnormality to the foetus or when the life of the mother is endangered. For instance, when the life of woman is endangered by a present pregnancy or when the foetus has an abnormality that could not allow the baby to survive an abortion can be legally conducted. However, at home and in the case of bush abortions (back street abortions in South Africa) there is no medical indication for such abortion. Unfortunately, due to poor standards and care in these illegal practices, the woman

is exposed to complications. In Rwanda, it is prohibited for traditional healers to perform an abortion (Mutesi, 2011).

However, even although abortion is prohibited, 12.4% of participants wished for the service to be available should they unintentionally become pregnant.

Conclusion

The abortion issue is the debate all over the world, the present paper aimed at exploring the perception of women attending Nyagatare Health District, in Rwanda on abortion as one of family planning methods. The utility of family planning is to avoid unintended pregnancies by using correct and consistent chosen methods. The women living in Nyagatare District wish to have abortion program at the health centres at 12.4%. In Rwanda, the abortion issue remains to be problem. The present research was conducted to the women; there needs the views from men too.

References

- [1.] ABBOTT, P. & RWIRAHIRA, J. 2010. Millennium Development Goals: Rwanda Country Report 2010. Kigali: UNDP.
- [2.] ALASUUTARI, P., BICKMAN, L. & BRANNEN, J. (Eds.). 2008. Social research methods. London: Sage.
- [3.] BASINGA, P., MOORE, A., SINGH, S., AUDAM, S., CARLIN, L., BIRUNGI, F. & NGABO, F. (N.d.). *Abortion incidence in Rwanda*. Available from: http://paa2011.princeton.edu/download.aspx?submissionId=110387 [29 April 2011].
- [4.] BRINK, H. 2006. Fundamentals of research methodology for healthcare professionals. Second edition. Cape Town: Juta.
- [5.] BRISTOW, J. 2010. Abortion provision: Building on the gain. Abortion Review, 33:1-8.
- [6.] BURNS, N. & GROVE, S.K. 2005. The practice of nursing research: Conduct, critique, and utilization. Fifth edition. St Louis: Elsevier: Saunders.
- [7.] CAMPAIN LIFE COALITION, 2009. Canadian Abortion Facts.
- http://www.campaignlifecoalition.com/shared/media/editor/file/AbortionFactSheet-CLC.pdf.
- [8.] CASEY, S.E., MITCHELL, K.T., AMISI, I.M., HALIZA, M.M., AVELEDI, B., KALENGA, P. & AUSTIN, J. 2009. Use of facility assessment data to improve reproductive health service delivery in the Democratic Republic of the Congo. *Conflict and Health*, 3:1–12.
- [9.] CONSIDINE, J., BOTTI, M. & THOMAS, S. 2005. Design, format, validity and reliability of multiple choice questions for use in nursing research and education. *Collegian*, 12(1):19–24.
- [10.] DCDP (DEVELOPMENT COMMUNITY AND DECENTRALIZATION PROJECT / MINISTÈRE DE L'ADMINISTRATION LOCALE, DE LA BONNE GOUVERNANCE, DU DÉVELOPPEMENT COMMUNAUTAIRE ET DES AFFAIRES SOCIALS). 2007. Nyagatare District Development Plan 2008–2012. Nyagatare.
- [11.] DE MORA R. 2011. Eliminating Maternal Deaths from Unsafe Abortion in Uruguay. Accessed at: http://www.unfpa.org/news/eliminating-maternal-deaths-unsafe-abortion-uruguay
- [12.] DO, W.D.R. 2009. The RAPID Model. *Health Policy*, Available from http://www.healthpolicyinitiative.com/index.cfm?id=software&get=Spectrum [19 February 2011].
- [13.] DORENBOS, P.B. & VAN VUUREN, A. 2003. *Abolition of abortion*. Hilversum, Holland: Cry for Life International.
- [14.] FORD, N., MILLS, E.J., ZACHARIAH, R. & UPSHUR, R. 2009. Ethics for conducting research in conflict settings. *Conflicts and Health*, 3(7):1–9.
- [15.] FUREDI, A. (n.d). The causes of unplanned pregnancy. Accessed on
- http://www.prochoiceforum.org.uk/ri1.php#top
- [16.] GERHARDT, L.P. 2004. Research methodology explained for everyday people. http://dc435.4shared.com/doc/AT_yhLqd/preview.html [11 April 2011].
- [17.] GILBERT, N. 2008. Researching social life. Third edition. Guildford: Sage.
- [18.] GOLAFSHANI, N. 2003. Understanding validity and reliability in qualitative research. *The Qualitative Report*, 8(4):597–607.

- [19.] GRIGGS, C. 2009. As family planning goes global, Haiti becomes a case in point. Available from: http://www.thecuttingedgenews.com/index.php?article=11553&pageid=&pagename [26 May 2011].
- [20.] HARALAMBOS, M. & HOLBORN, M. 2000. *Sociology: Themes and perspectives*. Hammersmith: HarperCollins.
- [21.] HARROWING, J.N., MILL, J., SPIERS, J., KULIG, J. & KIPP, W. 2010. Culture, context and community: Ethical consideration for global nursing research. *International Nursing Review*, 57:70–77.
- [22.] HUMAN RIGHTS. N.d. *Abortion and human right: Declaration of right of the child.* Available from: http://www.qrtl.org.au/humanrights.htm [9 May 2011].
- [23.] JONES, S. 2008. Fertility and population: Interview with John Guillebaud. *South African Journal of Obstetrics and Gynaecology*, 14(1):4-4.
- [24.] KAHL, L. 2011. What is convenience sampling? Available from: http://www.wisegeek.com/what-is-convenience-sampling.htm [2 May 2011].
- [25.] KEELE, R. 2011. Nursing research and evidence-based practice: Ten steps to success. Available from:

http://books.google.co.za/books?id=0g-

f3YzPNU0C&pg=PA62&dq=Population+by+Burns+and+Grove+2010+(Nursing+Research)+book&hl =en&ei=MEq8TZaCBILB8QPO-

vnKBQ&sa=X&oi=book_result&ct=result&resnum=2&ved=0CEYQ6AEwAQ#v=onepage&q&f=fals e [30 April 2011].

[26.] KUMAR, R. 2005. Research methodology: A step-by-step guide for beginners. Second edition. Available from:

http://books.google.co.za/books?id=x_kp__WmFzoC&pg=PA158&lpg=PA158&dq=internal+consistency+(research+methodology)&source=bl&ots=mQl7A_de-

c&sig=4lLRS2aRZFAv4C_Fyj3PFzkiTc4&hl=en&ei=kXi-

- TYPFG8nNswa9u8j8BQ&sa=X&oi=book_result&ct=result&resnum=8&ved=0CHAQ6AEwBw#v=o nepage&q&f=false [2 May 2011].
- [27.] MATVEEV, A.V. 2002. The advantages of employing quantitative and qualitative methods in intercultural research: Practical implications from the study of the perceptions of intercultural communication competence by American and Russian managers. *Bulletin of Russian Communication*, 168(1):59–67.
- [28.] MOULE, P. & GOODMAN, M. 2009. Nursing research: An introduction. London: Sage.
- [29.] MUTESI, T. 2011. 2 arrested for abortion. ORINFOR. 23 April. Available from:

http://www.orinfor.gov.rw/printmedia/topstory.php?id=2761 [29 April 2011].

- [30.] NAMBI, V.I. (Ed.). 2009. Abortion still a challenge to reproductive health. *The New Times*. Available from: http://allafrica.com/stories/200906240198.html [29 April 2011].
- [31.] NDIKUBWAYEZU, G. (Ed.). 2009. Legalise abortion, members of parliaments demand. *The New Times*. Available from: http://allafrica.com/stories/200907310051.html [29 April 2011].
- [32.] POLIT, D.F. & BECK, C.T. 2008. Nursing research: Generating and assessing evidence for nursing practice. Philadelphia, PA: Lippincott Williams & Wilkins.
- [33.] STACEY, D. 2008. *Natural contraceptive methods: Natural family planning options*. Available from: http://contraception.about.com/od/naturalmethods/tp/behavioral.htm [8 April 2011].
- [34.] THAXTON, M. 2007. *Integrating population, health, and environment in Kenya*. Available from: http://www.prb.org/pdf07/phe-kenya.pdf[29 December 2008].
- [35.] TSUI, A.O., MCDONALD-MOSLEY, R. & BURKE, A.E. 2010. Family planning and the burden of unintended pregnancies. *Epidemiologic Reviews*, 32(1):152-174.
- [36.] TWYCROSS, A. & SHIELDS, L. 2004. Validity and reliability what's it all about? Part 1: Validity in quantitative studies. *Paediatric Nursing*, 16(9):28-28.
- [37.] UNDIE, C.C. & RAMARAO, S. 2010. Community mobilization for post abortion care in Kenya: Baseline evaluation report. The RESPOND Project Study Series: Contributions to global knowledge, report no. 2. New York: Engender Health/The RESPOND Project.
- [38.] WEAVER, K. & OLSON, J.K. 2006. Understanding paradigms used for nursing research. *Journal of Advanced Nursing*, 53(4):459–469.