
Access to Information on Family Planning (FP) Methods Among Married Women of Reproductive Age in Ilala District, Dar es Salaam Tanzania

Faraja Ndumbaro

Information Studies Programme, University of Dar es Salaam, Tanzania

Email: ndumbaro.faraja@udsm.ac.tz

Lucy M Ochieng

Institute of Finance Management, Dar es Salaam, Tanzania

Email: lucyntobbi@gmail.com

Abstract

The paper reports the results of the study on access to information on family planning (FP) methods among urban married women of Ilala district, Dar es Salaam. In particular, the study assessed patterns to which married women access information on FP methods and challenges they face in the process. In total 119 married women attending maternal clinics at Buguruni, Amana, Mnazimmoja and Muhimbili hospitals were conveniently selected. Besides, 8 maternal health service providers were purposively selected from the four hospitals. Qualitative data were collected using key informant interviews while quantitative data were collected through face to face questionnaire. Notably, maternal health service providers, friends, neighbours and relatives were the main sources of contraceptive information among married women. Women's employment status, spouse's disapproval, formats and language of information contents are the main factors determining access to information on contraceptive methods. Results further show that women's levels of education correspond with their perceptions on challenges in accessing contraceptive information. It is concluded that maternal health clinics are not the only hubs for accessing information on contraception but also platforms in which knowledge is created and shared among women and between women and health service providers. The study recommends partners' involvement in clinics and repackaging information as mechanisms to increase access to and eventually effective utilization of information on family planning among married women.

Keywords: Reproductive health; contraceptive information, contraceptive methods, family planning, Ilala, Tanzania

Introduction

Family planning (FP) has a multitude of health, social, and economic benefits for women, their families and nation at large. FP services can help in improving maternal and infant health, reducing unintended pregnancies and unsafe abortions (Foreman & Spieler, 2013). As women's educational and employment opportunities improve, plus full participation in contributing to the family's economic wellbeing, women are more likely to use methods of family planning (Kitula, 2017; Kassim, 2020). A proper use of contraceptive methods enables women to actively engage in family planning and fully participate in the labour force. Likewise, family planning contributes much in reducing malnutrition and improving child's survival and mother's health status (USAID, 2005).

While there are different methods of contraception, the main clusters include modern and traditional methods. Modern contraceptive methods comprise of sterilization, intrauterine devices (IUDs), contraceptive implants, contraceptive injection, oral contraceptive pills, male and female condoms, emergency contraceptive pills, contraceptive patches, spermicidal foams and sponge Access to Information on Family Planning (FP) Methods Among Married Women of Reproductive Age in Ilala District, Dar es Salaam Tanzania

(Hubacher & Trussell, 2015). Traditional contraceptive methods include calendar method, withdrawal and folk methods (Marquez, Kabamalan, & Laguna, 2017), cervical mucus and lactational amenorrhoea methods (Almalik, Mosleh & Almasrwe, 2018). Other traditional methods of contraception particularly common in African are virginity inspection (Shange, 2012) as well as use of traditional medicine and herbs (Keele, Forste, & Flake, 2005).

At the global and local levels various initiatives have been taken to improve the uptake of contraceptives. These include the inclusion of targets relevant for family planning in the 2030 Agenda for Sustainable Development goal 3 and goal 5. Understandably, the Government of United Republic of Tanzania has also embarked on a journey to improve contraceptive methods uptake in the country by committing itself in supporting various regional and global agendas. The government has adopted the 2030 Agenda on Sustainable Development Goals (SDGS), The Africa Union “Extended Maputo Plan of Action on Sexual and Reproductive Health and Rights” (2016-2030) and the Five-Year Costed Implementation Plan for Family Planning 2018-2022. Furthermore, contraception is given priority in other strategies and action plans such as the One Plan II 2016-2020 and the Health Sector Strategic Plan IV 2015-2020 (UNFPA, 2019). Similarly, the National Population Policy of 2006 and National Health Policy of 2017 underscore the importance of sensitizing general public about the importance of family planning (FP) and the need to involve stakeholders from non-governmental sector in providing FP services respectively (URT, 2006; URT, 2017). Despite these initiatives and presence of policy framework in Tanzania, evidence indicate that, the use of contraceptive methods is still relatively low (Safari, et al, 2019).

Access to information on contraceptive method is one of the important components of any family planning programme. UNFPA (2019) describes FP as not only a set of methods and means on making decision if and when to have children, but also information on how and when to become pregnant. Women’s rights to contraceptive information is entrenched within the basic human rights (WHO, 2017). To fulfil this basic human right, not only availability, but also access to information on contraception use is of paramount importance. Despite the fact that availability of the information on FP is one of the essential components of FP, little research attention has been paid to study how married women access information on contraceptive methods. Much attention has been on understanding preferences of FP method (Safari, et al, 2019), and knowledge and awareness of contraceptive methods (Kapiga, Hunter & Nachtigal, 1992; Msoffe & Kiondo 2009; Kara, Benedicto & Mao, 2019). There is a need to establish factors that either promote or hamper decision to access contraceptive information to support family planning among married women. Such knowledge gap presents a missed opportunity for full-scale exploitation of the benefits of contraception. This calls for a need to document and understand whether women have access to right information on family planning methods from the trusted sources. It is from this perspective, the study was carried out to assess married women’s access to information on contraceptive methods of FP. Specifically, the study was informed by the following research questions: What sources of information on FP methods do married women in Ilala district access? What are the challenges faced by married women in accessing information on of family planning methods?

Related literature

Access to Information on Family Planning Methods

Contraceptive information is very crucial to women who want to prevent unwanted pregnancies hence help to reduce induced or unsafe abortions. The term access has been broadly used within the context of this study to include physical/ virtual access, intellectual access and social access. Such holistic



conception of access to information has been put forward by Jaeger and Burnett (2010) in their theory of information worlds. Access to information on contraceptive methods of FP has potential for not only increasing uptake of contraceptives but also making informed decisions on highly effective and trusted methods. Previous studies on contraceptive information of FP have focused on aspects such as trustworthiness of sources of FP (Masatu, Kivale, & Klepp, 2003; Ajaero, Odimegwu, Ajaero, & Nwachukwu, 2016), awareness on contraceptive information sources (Bankole, & Onasote, 2017) and general pregnant related information seeking practices (Das, & Sarkar, 2014). Interestingly, while these studies are on FP information sources, the subject of enquiry are students and rural women. Chukwuji, Tsafe, Sayudi, Yusuf, and Zakariya (2018) studied issues on access and utilization of FP information. Generally, women have access to wide range of information sources, ranging from maternal health providers (Alege, Matovu, Ssensalire & Nabiwemba, 2016; Olubanke & Onasote 2016), contents from mass media and social media (Olubanke & Onasote 2016; Alege et al, 2016; Ghike, et al 2010) as well as friends and neighbour (Olubanke & Onasote 2016). In particular, Khandeparkar, Roy and Motiani (2015) explore effects of women's exposure to mass media on contraceptive adoption. Evidently, TV viewership was found to be an important predictor of contraception use while radio and print media had no overwhelming effects on contraception use. In the study of women counselling Eckerdal (2012) revealed that during consultation meeting women not only access information on contraception but also become sources of information to midwives. Eckerdal (2012) further describes such interaction as the loci for knowledge creation that benefits all parties.

The Internet has revolutionized the way women access information on FP. With advent of Information Technology women are exposed to wide range of information sources on contraceptive methods of FP. The Internet is perceived to be accessible with ample sources of information on contraception. Empirical studies have generated contradictory results on the role of the Internet in facilitating access to FP information among women. Philipson, Wakefield and Kasparian (2011) and Gafar, et al, (2020) have noted that married women with access to the Internet are less likely to use contraceptive information to make informed decision. It is evident from these studies that majority of women do not trust information on the Internet. As a results women prefer to consult people within their immediate circles including friend, relatives and professional maternal health service providers. On different note, Yee and Simon (2011) hold that FP information sources found on Internet is affordable, accessible and can be accessed without privacy infringement. The fact that there are mixed results could be attributed by difference in contexts where these studies are conducted.

Despite existence of numerous studies on access to contraceptive information of FP (Msoffe & Kiondo, 2009; Philipson, Wakefield & Kasparian, 2011; Bankole, & Onasote, 2017; Gafar, et al, 2020), the review of literature has identified some research gaps. Most of these studies have focused on sources and use of family planning methods (Alege et al, 2016) as well as knowledge, attitude and practices about contraceptive (Srivastav, Khan, & Chauhan, 2014). While there are number of studies on FP methods, a cursory review of literature has identified a paucity of studies on access to contraceptive information in Tanzanian context. Most of studies have focused on use of contraceptive methods among women of reproductive age (Dennis, 2017;) and determinants of contraception use (Ayoub, 2004; Msoffe & Kiondo, 2009; Anasel & Mlinga, 2014). Few studies have concentrated on contraceptive information and knowledge (Simba, Schuemer, Forrester, & Hiza, 201; Msovela, Tengi-Kessy & Mubyazi, 2016).

Challenges faced by married women in accessing contraceptive information

Despite of the countless benefits of contraceptive information, there are still challenges faced by women in accessing contraceptive information. More than 220 million women in developing countries who do not want to get pregnant lack access to contraceptives and voluntary family planning information and services (UNFPA, 2019). There are range of constraints that prevent women from accessing contraceptive information. Illiteracy, language barriers, lack of adequate health workers and ill-developed health infrastructure are some of the constraints facing women (Musoke, 2007). Likewise, long distance to health facilities and shortage of healthcare workers, unsupportive partners and social stigma are also some of the challenges facing women when seeking information about safe contraceptive methods (UNFPA, 2019).

Women are also faced with the challenges in identifying appropriate and trusted source of information (Hall, Stephenson & Juvekar, 2008). Women have negative perceptions with regards to some of the information available. Women lack of trust to some of the available information sources, perceived inaccurate and bias of the sources are some of the challenges noted (Hall, Stephenson & Juvekar, 2008; Carroll & Kapilashrami, 2020). In some cases, women feel discomfort seeking information in public health facilities (Carroll & Kapilashrami, 2020). All these barriers result to women's failure to fulfilling their FP related information needs and eventually, impact contraception uptake among women.

Theoretical framework

This study was underpinned by the theory of information worlds as promulgated by Jaeger and Burnett, (2010). The theory of information worlds is a multi-level theory which stipulates that humans live in information worlds which are interconnected, overlapping and intersecting (Jaeger & Burnett, 2010). Within these information worlds, individual information behaviour is moulded by myriad of attributes including immediate influences, intermediate influences and large influences (Burnett & Jaeger, 2011; Jaeger & Burnett, 2010). These influences many range from friends, family members and trusted sources to macro social influences such as technologies, politics and institutions in which individual work. According to this theory, the aggregated influences from micro, messo and macro worlds impact on the way individual conceptualize, access and use information in different contexts and settings.

The theory is built upon five key elements: Social types, informatation value, social norms, boundaries and information behaviour. Social types defines individual's implicit or explicit roles within a society or "information world" (Jaeger & Burnett, 2010). While social norms include a set of agreed-upon normative behavior within a world, information value encompasses individuals' perceptions about importance of different types of information (Jaeger & Burnett, 2010). The theory further describes information behaviour as both activities and practices related to information within specific information world. These activities and practices include information access, seeking, sharing, using and even information avoiding.



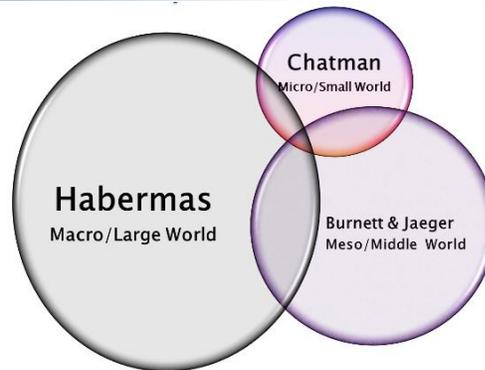


Figure 1: Theory of information worlds
Source:Krub, 2011

Lastly there are boundaries which are “hot spots” through which information worlds intersect. The theory identified different boundaries such as contiguous, embedded, physical and virtual boundaries (Burnett & Jaeger, 2011). In relation to the current study, the theory has been used to support the assessment of access to contraceptive information. Precisely the theory has been used to inform discussion on factors influencing information sources preferences, patterns in which married women access contraceptive information and barriers they encounter when accessing such information.

Research methodology

Research design and research approach

This study is based on exploratory research design. The study assessed how married women in Ilala District access information on family planning methods. The choice of exploratory research design was largely influenced by research problem under investigation and research objectives that guided the study. A mixed methods approach which comprised both quantitative and qualitative approaches was employed. A total of four public health facilities providing maternal health services were selected among the available health facilities in Ilala District. These are Muhimbili hospital, Amana hospital, Mnazimmoja hospital and Buguruni health centre. Unlike private health facilities, these public health facilities provide health services to more women in Dar es Salaam.

Study population and sampling procedures

The study population comprised of two main groups; married women and contraceptive health services providers. Most of the contraceptive methods available are women based. Married women being within this category are very much in need of these contraceptive methods for family planning. Convenience and purposive sampling techniques were used to select married women. Not all women who attended clinics during the study period were in wedlock. The study purposively excludes women of reproductive age who are not married. Only married women who were available at the clinics and

willing to participate in the study were conveniently included in the sample. Purposive sampling method was used to select contraceptive health service providers. These are key informants, with relevant knowledge and experience. Hence their selection was based on their roles and knowledge in providing FP services to women. In total 119 women and 8 health service providers were recruited and participated in the study. The sample was found to be optimal due to the fact that participation was based on respondents' availability and willingness to participate. Table 1 elucidates sample size distribution in four health facilities covered during the study:

Table 1: Sample repartition (n=127)

Health facilities	Married Women	Health service providers
Muhimbili	45	2
Amana	24	2
Mnazi Mmoja	19	2
Buguruni health centre	31	2

Source: Field data, 2019

Data collection methods, analysis and presentations

Primary data were gathered using interview and questionnaire survey whilst secondary data were collected from both published and unpublished sources of information. Key informants were interviewed. The interviews focused on two key aspects: contraceptives information sources and channels used by women and strategies used by health service providers to enhance access to contraceptives information. Questionnaire was administered to married women attending clinics using face to face approach. The questionnaire contained questions on channels and sources of information on contraceptive methods of family planning, and challenges that married women faced in accessing and using information on contraceptive methods of family planning. Data analysis was performed at different levels. Qualitative data were descriptively analyzed and presented using narrative forms and quote extracts. Quantitative data were organized, coded, described, and analyzed IBM Statistical Product and Services Solution (SPSS) program.



Data quality assurance and ethical concerns

The study applied several measures to enhance data quality. These include the use of multiple data collection methods and pretesting of research instruments prior to actual data collection. Research instruments were tested at Mlawa health centre, located at Vingunguti, Ilala district. Furthermore, the questions underwent expert and peer reviews prior to data collection. Based on the evaluation, some questions in research instruments were corrected. With regards to research ethics, respondents were assured of the confidentiality of information provided. Efforts were made to make sure that no inducements are used to make selected sample to participate other than travel expense for some cases. Participants were informed about the purposes of the research and any other information that was required by them before taking part in the study. Prior to actual data collection, researchers applied for research permits and granted permission by University of Dar es Salaam and Ilala Municipal Council.

Results

Demographic characteristics of respondents

Respondents were asked to indicate their ages, level of education, occupations and religious affiliations. These demographic variables were deemed important in determining influence of respondents' socio-demographic variables on access to contraceptive information. The results on respondents' demographic characteristics are presented in table 2:

Table 2: Respondents' demographic characteristics

Age, level of education, occupation and religious affiliations n=60	Frequency	Percent
Age groups [years]		
21-25	11	9.2
26-30	58	48.8
31-35	31	26
36-40	17	14.3
>40	2	1.7
Levels of education		
Primary education	23	19.3
Secondary education	82	68.9
University education	14	11.8
Occupations		
Civil servants	28	23.5
Petty businesswomen	51	42.9
Housewife	39	32.8
College students	1	0.8
Religious affiliations		
Christian	62	52
Muslim	57	48

Source: Field data, 2019

The results presented in table 2 suggest that majority 89 (74.8%) of respondents are between the ages of 26 and 35. The age distribution of respondents corresponds with women's demands and use of contraceptive methods. It is during this period when most women are in higher level of fertility ages. On the other hand, the needs for contraception, and eventually, contraceptive information may drop as a person grows older and approaches to menopause. Another socio-demographic variable studied was women's level of education. Education level of a person is a very essential attribute in determining ability to access contraceptive information. Due to that, the respondents' level of education was seen as of great importance in understanding married women's access to and use of contraceptive information. The results indicate that majority, 82 (68.9%) of married women had attained secondary education. Relatively few women are graduates and primary school leavers. These results reflect high level of literacy in Tanzanian urban areas where access to education is relatively improved compared to rural areas. With regards to the employment status of respondents, it was noted that most of the women studied were petty businesswomen and housewives, making up 42.9% and 32.8% respectively. The last demographic variable included in the study was respondents' religious affiliations. Out of 119 women participated in the study, 62 (52%) were Christians and 57 (48%) were Muslims.

Sources of information on contraceptive methods of FP

Married women of reproductive age use wide range of information sources when making decisions on contraceptive methods of FP. The results from the survey confirm this where difference sources of information were identified. The results are presented in Table 3:

Table 3: Contraceptive information sources (n=119)

Sources	Frequency	Percent
Health service providers	119	100
Neighbors, Relative and friends	68	57.1
Radio	31	26
TV	29	24.4
Web based sources	8	6.7
Print sources	34	28.6

Source: Field data, 2019

Married women consult multiple sources in accessing contraceptive information. In particular, it is evident from this study that majority of married women relied on health service providers 119 (100%), neighbors, relatives and friends 68 (57.1%) as their main sources of contraceptive information. The results from interview also confirm high reliance on human sources of information.

... we provide them with relevant information...besides they also share information among themselves while they are at clinic.... most of them had already used some of the methods hence they share unlimited experience and advice concerning the usage of these contraceptive...[Health Service Provider, Adult Female_01, Amana Hospital].

It is evident from the above extract that attending maternal clinics not only provide platform for women to access contraceptive information from family planning professionals, but also share



experiences and knowledge among themselves. Reliance on health service providers can be attributed to economic statuses of the respondents and their individual perceptions of other sources. The following interview extract further illustrates additional benefits of relying on human, professionals as sources of contraceptive information:

The sessions are very interactive. They have opportunities to ask questions and clarification...we also tell them advantages of using contraceptive methods as they have to know the advantages behind using contraceptive methods so that they find worthy using
 [Health Service Provider, Adult Female_01, Muhimbili Hospital]

A cross tabulation of respondents' employment status and contraceptive information sources preferences was performed. The results are presented in table 4:

Table 4: Respondents' employment status and information sources preferences, n=119

Employment status	Health Service Providers		Relatives, Friends		Radio		TV		Printed materials		Web based sources	
	F	%	F	%	F	%	F	%	F	%	F	%
Civil servants	28	23.5	10	8.4	7	5.9	3	2.5	17	14.3	6	5.1
Petty business	51	42.9	23	19.3	11	9.2	9	7.6	9	7.6	1	0.8
Housewives	39	32.8	34	28.6	13	10.9	16	13.5	6	5.1	0	0
Student	1	0.8	1	0.8	0	0	1	0.8	2	1.6	1	0.8

Source: Field data, 2019

It is evident from the results that women's information sources preferences vary based on their employment status. The results suggest that human sources of contraceptive information including health service providers, and friends are relatively preferred by housewives and petty businesswomen. In addition to human sources of information housewives relatively prefer electronic media (TV and Radio) while married women working as civil servants prefer to access print sources of information.

Women's access to information on Family Planning methods

Access to information on contraceptive methods of family planning is a multi-layered concept that goes beyond physical or virtual access. Three dimensions of information access namely: physical or virtual access, intellectual access and social access were studied. Table 5 summarizes married women's perception on ease access to information on contraception methods:

Table 5: Ease of physically or virtually accessing information on contraceptive method of FP, n=119

Information sources	Very easy	Easy	Slightly easy	Difficulty	Very difficult
Health services providers	21(19.7%)	98(82.3%)	0(0%)	0(0%)	0(0%)
Neighbours, friends and relatives	47 (39.5%)	21(17.6%)	0 (0%)	0 (0%)	0 (0%)
Web based sources	0(0%)	2 (1.7%)	4 (3.4%)	2 (1.7%)	0(0%)
Print sources	2 (1.7%)	22(18.5%)	6 (5%)	3(2.5%)	1(0.8%)
TV	5 (4.2%)	14 (11.8%)	10 (8.4%)	0 (0%)	0 (0%)
Radio	2 (1.7%)	8 (6.7%)	21(17.6%)	0 (0%)	0 (0%)

Evidently, women find it easy to access information from human sources such as health services providers, neighbours, friends and relatives. Likewise, substantial number of women indicated that it is easier to access information from print and electronic media. The theory of information world describes intellectual access as ability of an individual to understand information accessed. Analysis of women's perception on ease of understanding different contraceptive information sources was carried out. The results are presented in Table 6:

Table 6: Ease of understanding information on contraceptive method of FP, n=119

Information sources	Very easy	Easy	Slightly easy	Difficulty	Very difficult
Health services providers	12(10%)	71(59.7%)	27(22.7%)	9(7.6%)	0(0%)
Neighbours, friends and relatives	16 (13.4%)	49(41.2%)	3 (2.5%)	0 (0%)	0 (0%)
Web based sources	0(0%)	0 (0 %)	5 (4.2%)	3 (2.5%)	0(0%)
Print sources	6 (5%)	18(15.2%)	9(7.6%)	1(0.8%)	0(0%)
TV	1 (0.8%)	21(17.6%)	4 (3.4%)	3 (2.5%)	0 (0%)
Radio	0(0%)	13 (10.8%)	18(15.2%)	0 (0%)	0 (0%)

With regards to intellectual access (cf. table 6) it is evident that information from health service providers, neighbours, friends, relatives and TV is easily understood by married women. The third attribute of information access was social access. This refers to individual's ability to use information within specific context. In the context of this study, the intent was not to study actual use of contraceptive information but rationale for accessing. Specifically, married women were asked to indicate intended reasons for accessing contraceptive information. The results suggest that women had wide range of reasons. The results are illustrated in table 6:



Table 7: Reasons for accessing information n=119

Reasons for accessing information	Frequency	Percent
The benefits and side effects of contraceptive methods	88	73.9
Proper use of contraceptive methods	103	86.6
A need to make informed decisions	28	23.5
Confirmation of what is known	54	45.4

Source: Field data, 2019

Most information accessed by married women related to benefits and side effects of contraceptive method (88, 73.9%) and proper use of contraceptive methods (103, 86.6%). Other married women seek information to confirm what is already known while others seek information to inform proper decision making about FP. These results not only establish reasons for accessing information on contraception methods, but also indicate that women had multiple contraceptive information needs.

Challenges faced by married women when accessing and using information

Married women face number of challenges when accessing information on contraceptive methods of FP. A cross tabulation between women’s level of education and challenges in accessing contraceptive information was conducted. The results are presented in table 7:

Table 7: Challenges faced in accessing contraceptive information, n=119

Level of education	Challenges faced in accessing contraceptive information									
	Information format		Lack of information seeking skills		of Cost accessing information		of Scarcity of information sources		of Language of the content	
	F	%	F	%	F	%	F	%	F	%
Primary education	8	6.7	10	8.4	4	3.4	0	0	14	11.8
Secondary education	6	5	31	26	47	39.5	13	10.9	17	14.3
College / University	0	0	11	9.2	5	4.2	2	1.7	1	0.8

Source: Field data, 2019

From the cross tabulated data, it was noted that lack of information seeking skills and difficult in understanding language of the contents are the main challenges facing majority of married women with primary level of education. On the other hand, women with secondary level of education

recounted that cost of accessing information and lack of information seeking skills deterred ability to access information.

Lack of intellectual access was also reported by health services providers as a challenge. Existence of multiple sources of information and inability to identify trusted sources pose some challenges to women. Women are faced with the challenge of identifying the most trusted sources.

...the fact that there are practitioners of traditional methods of family planning makes women confused which source to trust...they come while their minds are full of negative information that they share and they don't want to empty their cups to receive what we are giving them. [Health Service Provider, Adult Female_01, Buguruni Hospital]

This comment confirms that although married women do have reliable sources of accessing contraceptive information such as health service providers, their minds are full already with negative information concerning contraceptive methods and hence remain confused. The findings also confirm that spouse's disapproval as one of the biggest challenges faced by women.

Some male partners discourage their wives to find information on safe use of contraceptive methods on the ground that it conflicts with religious teaching. [Health Service Provider, Adult Female_02, Mnazi Mmoja Hospital].

Discussions

The consensus view among researchers is that women fertilities decrease with ages (Deatsman, Vasilopoulos, & Rhoton-Vlasak, 2016). Most of the women (58%) studied (cf. table 2) are in their active reproductive ages, that is between 20 and 30 years. It is important to note that while women between 20's and 30 are in higher level of fertility, women in childbearing age are those between 15 to 49 years. One should therefore underscore the fact that all these women of are in need of information on FP for different reasons. Women in the most active category need information because they are in higher level of fertility. On the contrary, those who approach menopause also need because this is the category with multiple risks of pregnancy complications.

Contraceptive information is very important in ensuring the health and wellbeing of women and their children altogether. Married women need to effectively access contraceptive information to be in good position to make informed decisions on their maternal health. Relating results with the theoretical perspective, one could clearly see how micro, intermediate and macro worlds putting married women's needs and sources preferences. The micro world, which in this case include friends, neighbours and relatives was found to largely influence how women access information. Human sources of information were highly preferred because they are conveniently available and ready to help. This was noted by Ndumbaro (2016) that when social ties are strongly established people will prefer to seek information from other people. Das and Sarkar (2014) report that women's choice of where to get health information is influenced by the perceived trustworthiness of the source. Healthcare professionals are regarded by women as the most trusted sources of health information (Das & Sarkar, 2014). The fact that the study was carried within the premises of health facilities could also explain the observed pattern. It is worth noting that women also consult other sources as well. Women's preference on multiple sources of contraceptive information was also reported in study by



Msovela, Tengia–Kessy and Mubyazi (2016). Availability of multiple sources of information, particularly in urban areas and women’s the level of education (cf. Table 2) may also influence them to be exposed to multiple sources of information. Low usage of mass media can also be linked with unfavorable scheduling of programmes. Some of the TV and radio programmes are aired in time when women are busy with their daily activities such as domestic chores or businesses.

Women’s occupations are part of intermediate world. On the other hand, the available technologies such as internet and electronic media constitute part of macro world. Results (c.f. 4) indicate the women’s economic activities and presence of technologies partly influence their preferences in accessing contraceptive information. From the theoretical framework underpinning this study the term access has been holistically used to include not only physical or virtual access to information but also intellectual or ability to comprehend information (Jaeger & Burnett, 2010; Burnett & Jaeger 2011). Most of the women had relatively high level of education. This could contribute to their ability to associate their information needs with sources of information. Previous studies have established association between women’s level of education and ability to understand and eventually comprehend information on FP (Ochako et al., 2015, Kitula, 2017; Kassim, 2020). Ochako et al (2015) noted that women’s improved level of education and exposure contributed to access and ultimately use of contraceptive information. Low level of education on the other hand has adverse negative impact on women’s ability read and comprehend maternal health information provided in print format (Kassim, 2020). This is what is described in theory of information worlds as lack of intellectual access to information.

Interestingly, maternal health clinics were not only a place for women to meet and access information on contraception, but also a platform where new knowledge is constructed through dialogic conversations. Reported from this study is an opportunity for women to share experience among themselves and hence create new knowledge. Related to this observation, are the results from, Eckerdal (2012) who found that during counselling information meetings women become not only recipient of information from midwives but also sources of information to midwives.

It is evident from results that education levels partly correspond with women perceptions of challenges they encounter when accessing contraceptive information (cf. table 7). Inability to understand language used in presenting FP information could be associated with women’s low level of education. Interestingly, the results also show that irrespective of level of education, lack of information literacy skills affect equally both women with low level and high level of education. It could be speculated that in addition to women’s level of acquired knowledge, women also need information literacy skills. This will also help them to navigate to different contraceptive information landscapes. It was worth noting that exposure to multiple informal sources of contraceptive information pose challenges to some women. The results suggest that women are overloaded with information which not only contradicts but also conflicting with their existing knowledge base.

Conclusions and Recommendations

Contraceptive information is one of the important elements in the provision of contraceptive services. When married women access right information, they are in a good position to make informed decisions concerning contraception issues. It has been established in this study that there is overreliance of humans as the main sources of information on contraceptive methods. This raises an

alarm on the need for stakeholders to bring into light other contraceptive information sources to these individuals so as to enhance them in extending their knowledge on contraceptive matters.

As reported in the findings, maternal clinics offer opportunities for women not only to access contraceptive information from health providers but also sharing experiences and knowledge among themselves. Underlining the importance of these face-to-face interactions, it is recommended that women should be encouraged to engage more on these interactions. Some male spouses were reported to discourage women from accessing contraceptive information. There is a need for the government and other non-state actors to initiate special programmes that will increase awareness among male counterparts and oblige them to involve in contraceptive services.

The study implicates formats of some of the information sources and language contents as barriers in accessing information. It is recommended that information on contraceptive methods should be repacked in a format and language that is appropriate to the targeted audience. Repackaging should be done in such a way that every woman can be able to understand the information. Different information packaging techniques can be applied such as creating brochures with pictures, preparing short films or videos that educates and convey contraceptive information. This will enable women of all calibers to be able to understand information contents provided.

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