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Accessibility and Use of Family Planning Information (FPI) by Rural People in Kilombero District, Tanzania

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Abstract

This study investigated the accessibility and use of family planning information (FPI) by rural people in Kilombero District, Tanzania. The purpose was to examine the entire infrastructure required for accessing and using FPI in a rural setting. The study surveyed 120 respondents using questionnaire, interview protocols and observation guides. The respondents included women and men of reproductive age, and Maternal and Child Health (MCH) clinic staff. The study revealed that there is inadequate knowledge of various family planning methods (FPMs) and limited access and use of FPI. The situation is caused by ignorance, inconsistent availability of FPMs, few staff with limited training, inaccessibility of family planning services (FPS) and patriarchal gender relations. Furthermore, the study found that rural communities access FPI through radio and MCH clinic staff. The study concludes that the surveyed rural communities are disadvantaged in accessing and using FPI. It recommends that there should be provision of more health facilities in rural areas, training of MCH clinic staff, raising public awareness of family planning, ensuring constant availability of all FPMs, provision of family planning education in schools and provision of necessary facilities needed for effective dissemination of FPI in the rural settings.

Keywords

Family planning information, information access, rural communities

Introduction

Rapid population growth is of major concern worldwide. Every twelve or thirteen years, another billion people are added to the world's population, majority of them from developing countries (Brown et al., 1999). Although fertility levels are falling in many parts of the world, rapid population growth remains a critical issue in most developing countries where needs are great and resources are scarce (Upadhyay and Robey, 1999). The population of Tanzania has almost tripled in 35 years. It has grown from 12, 313,469 persons in the first post-independence census held in 1967 to 34,569,232 persons counted in the census held in August 2002, with the population growth rate of 2·9% (World Bank, 2003; United Republic of Tanzania, 2003). It is estimated that Tanzania's population will grow to 35.4 million in 2010 despite the effects of Acquired Immune-Deficiency Syndrome [AIDS] (United Nations Population Division, 2005). In Tanzania, 74% of the population live in rural areas (World Bank, 1999). It is in the rural areas that the population is still growing at a higher rate amidst poor social and

economic infrastructure support. Consequences of population growth can potentially restrain investments in human capital and provision of services that are important towards fulfilment of Millennium Development Goals (MDGs).

The government of Tanzania recognises the importance of family planning to the welfare of its people. The government through its public funded health clinics and also in partnership with a number of non-profit organisations such as Family Planning Association of Tanzania (UMATI) and Marie Stoppes Clinics have worked tirelessly to promote family planning and reproductive health. Despite the efforts, fertility rate has remained high at 6.3 children per woman (United Republic of Tanzania, 1997; Speizer et al., 2000). The situation is caused by low use of FPMs, especially in rural areas (Chen & Guilkey, 2003).

Research Problem

In Tanzania, Kilombero District in Morogoro region is one among the districts with high rate of population growth (3.4) compared to other districts in the same region such as Ulanga District (2.0), Kilosa District (2.3), and Morogoro Rural District (2.2). Kilombero District has a total of 322,779 people (United Republic of Tanzania, 2003). Despite of all the efforts that are taken to promote FPS, there is a high fertility rate in the district. The causes of high fertility rate, which lead to high population growth, presume an existence of one or more obstacles to the use of family planning. Therefore, this study was designed to examine levels of awareness, availability, knowledge and use of FPS and FPMs, as well as the entire information infrastructure required to support access and use of FPI in Kilombero district. The objective was to identify obstacles, if any, that may prevent access and use of FPI by rural people in the area and to recommend strategies to improve access to FPI and use of FPMs in order to reduce fertility rates and control population growth. The study was based on the assumption that increased access to FPI would create a knowledge base on FPMs among the rural people which will stimulate the use of FPMs and therefore reduce population growth.

Literature Review

Most developing countries recognise the importance of providing FPS. However, more often than not, most of the family planning programmes in developing countries have tended to focus on access to FPS and health facilities (Thang and Anh, 2002). The assumption is that provision and availability of FPS will help adoption of family planning and generate new users of FPS. Studies have shown that although several other factors (education, culture, information, social and economic) may affect the use of FPMs, proximity is a crucial factor because after access is guaranteed, then other factors that influence use could be considered (Hall and Bowerman, 1996). Levin et al. (1999) found out that couples were less likely to use FPMs if it takes long time to get to a service point. Magnani et al. (1999) showed that women who lived closer to a service point were more likely to use FPMs than those who lived far away. Therefore, access to FPS should consider the spatial distribution of the target population (Hall and Bowerman, 1996).

Availability of FPS should go in hand with access to information on individual FPMs to ensure their effective use (Thang and Anh, 2002). Studies (Jato et al., 1999; Bongaart & Bruce, 1995; Sherpa and Rai, 1997; Bruce, 1990) that have examined the role information plays on the use of FPS have found that information is a critical factor in the provision of FPS. In their study, Jato et al. (1999) concluded that the use of multiple sources of information promotes adoption of family planning. This approach has changed people's attitudes and facilitated acquisition of knowledge on family planning. On the other hand Bongaart and Bruce (1995) noted that good quality FPI helped people to have smaller families, lowered fertility levels and slowed population growth. A Mexican study has shown that provision of FPI has significant effect on choice of family planning and has enabled men to play positive roles in reproductive health (Sherpa and Rai, 1997). Upadhyay (2001) argues that access to accurate information assists target communities make informed choices which are responsible for use of FPMs safely and effectively.

In examining accessibility of FPI, it is important to note that the focus should not be on quantity of information but rather on quality. Kim et al. (1997) suggest two ways to improve quality of FPI: firstly, to put FPI into a personal context according to clients needs; and secondly, based on the needs, focus on two FPMs to which detailed and complete information is provided to make it easier for clients to understand the options and make informed decisions.

In order to ensure access to information, there is need to note that access to information is facilitated by the availability of an information infrastructure, which includes appropriate and effective communication channels, delivery systems and access points needed for the acquisition, processing and use of information (Kiondo, 1998). A range of communication channels and delivery methods have been used in disseminating FPI. Studies (Jato et al., 1999; Kiragu et al., 1996; Valente, 1994) have documented successful interventions using one or more communication channels to deliver FPI. Jato et al. (1999) study on the use of multimedia to promote family planning concluded that multiple media sources of information reinforce one another and extends the reach of family planning messages. Complementary family planning messages from multiple sources create a conducive environment for changing attitudes and perceptions on family planning. A study by Kiragu et al. (1996) found that through the use of multiple communication strategies, family planning use increased from 25% to 32% within six months.

Despite various efforts undertaken by national governments, international organisations and the non-profit sector, it is estimated that over 350 million couples do not have access to full range of FPS and FPI (UNFPA, 1997). Studies (Bongaarts and Bruce, 1995; WHO, 2001) have identified several factors that limit access to FPS; these include poor access to services, limited choice of methods, concerns about side effects, as well as lack of accurate information on reproductive health and family planning. Another critical factor that may affect use of FPI is non-involvement of men in FPS. Studies (Wang et al., 1998; Tefere and Larson, 1993; Tapsoba et al., 1993) have shown that involvement of men can increase family planning use-effectiveness and continuation. Zimbabwe carried out a male motivation campaign on family planning and found out that men can be reached with family planning messages using appropriate communication channels. Furthermore, involving men through strong and appropriate family planning messages encourages communication between couples and ultimately decision to use family planning (Kim et al., 1996).

Studies have been conducted in developing countries, Africa and Tanzania on quality and availability of FPS (Betrand et al., 1995; Beegle, 1994; Kessy, 2001), reproductive health and family planning (Bongaart and Bruce, 1995; Family Health International, 1994), the role of information in the use of FPS and FPMs (Sherpa and Rai, 1997; Bruce, 1990) and family planning communication strategies (Kiragu et al., 1996; Kim et al., 1996). However, most of these studies have tended to focus on access and quality of services, role of information in FPS, appropriate communication strategies and information delivery mechanisms. Studies on accessibility and use of FPI among rural communities in Tanzania are still lacking.

Methodology

Kilombero District in Morogoro region was purposively selected as the area of study due to its higher population growth rate of 3.4% (United Republic of Tanzania, 2003). The study used both qualitative (interview and observations) and quantitative (survey questionnaire) research methods. The study identified two population groups: rural people of reproductive age and MCH clinic staff. To derive a representative sample, respondents were identified through a three multi-stage sampling and a simple random sampling technique. First, ten wards were randomly selected from a total of nineteen wards; second, one village was randomly selected from each of the ten wards (the ten villages were Kikwawila, Mbasa, Kisawasawa, Namawala, Mkasu, Katindiuka, Michenga, Lipangalala, Uchindile, and Sakamaganga); and third, from the list of all the households in each selected village, ten households were randomly selected (100 households). One respondent of reproductive age in each of the selected households was purposely selected to ensure gender balance. Therefore, in each village, five men and five women were included in the sample of 100 respondents. Two MCH clinics were randomly selected from each of the selected wards. From the

selected MCH clinics, one MCH clinic staff dealing with provision of FPS was randomly picked. A total of 20 MCH clinic staff were included in the sample.

A combination of data collection methods was used to ensure validity and reliability of the data. Primary data were collected using questionnaire, face-to-face interviews, and direct observation. Pre-tested questionnaire was administered to selected respondents. The interviewer met face-to-face with the respondents and asked them the set questions. Face-to-face interviews were conducted with the MCH clinic staff guided by an interview schedule. Observation of FPI dissemination activities at the MCH clinics was done using an observation guide. The primary data was supplemented by secondary data from published and unpublished documentary sources.

Findings and Discussion

Socio-demographic Characteristics of the Sample

The study was able to capture people of reproductive age as the majority of respondents (84%) were aged between 15 and 45 years. Most of them (62%) had primary school education, depended on agriculture for their livelihoods (98%) as subsistence farmers with low levels of income. To a certain extent, the levels of education and income of target population may have implication in terms of access to and use of FPI. On the other hand, MCH clinic staff were all women (100%) of low educational attainment. Most of them had primary school education (50%) and others had lower level certificates obtained after attending short health care courses. The gender of FPS providers and their levels of education impact negatively in provision of FPI services as indicated in previous studies undertaken in other countries (Kim et al., 2003; Wang et al., 1998). In most cases, the attitude among the people is that FPI is for women thus unconsciously removing men from accessing the information and knowledge required to control the number of births in the family. When both women and men are involved in dissemination of FPI, men are motivated to use FPMs. On the other hand, educated and trained FPS providers are more apt to provide professional services and thus change users' attitude and FPMs use behaviour.

Fertility Rates in the Study Area

The findings show that the fertility rate in the study area is high. At least 84% of the women respondents had between four and nine children, and between 36% and 46% have had a birth less than two years between first and fifth births. This fertility rate is closer to the documented fertility rate of 6.3 children per woman in Tanzania (United Republic of Tanzania, 1997) but above the standard fertility rate for population replacement, which is at 2.1 children per woman over a lifetime (Family Health International, 1994). It is also noted that a significant percentage of the respondents had birth interval of less than two years, which is less than the recommended three years and not safe for both mother and child. The findings indicate that birth control is still a challenge that needs to be addressed in a more scientific manner.

Availability of FPS and Community Awareness

In Kilombero district, family planning services (FPS) are mainly provided to the community as part of MCH services. All the MCH staff interviewed said that they provided FPS; 45% provided services through MCH clinics; and 55% through occasional family planning educational sessions where both men and women were targeted. However, only 69% of respondents were aware of availability of FPS and out of these, 47% said they accessed these services. The main service points where services were accessed are MCH clinics (35%).

Information Sources and Delivery Systems

The study examined the entire information infrastructure to determine the way sources of information are made available, delivery systems and communication channels used to deliver FPI. The findings indicate that less than a quarter of the respondents (23%) accessed FPI from the radio, compared to 20% who accessed from MCH clinic staff. Least used sources of FPI include friends and neighbours (5%), leaflets (4%) and posters (3%). Although very few respondents accessed FPI from radio, most of them (76%) indicated that it was the

most preferred source and most appropriate (92%) for delivery of FPI. The radio was followed by MCH clinic staff as the most preferred source (62%) and most appropriate (76%). Although field observations found out that family planning posters were extensively used in the delivery of FPI, this source was accessed and used by only 3% of respondents and preferred by 41%, and only 42% said it was most appropriate for delivery of FPI. The findings further indicate that traditional media such as drama, song and dance were not used for dissemination of FPI, although they were most preferred by 42% and 37% of the respondents respectively. Friends and neighbours were least preferred by 54% of the respondents and found to be least appropriate by 47%. This reflects the belief that family planning is something very personal, private and confidential, due to this notion, most people would prefer just to hear it on the radio or read it from newspapers, but not a friend or neighbour to be involved. The use and preference of radio may be attributed to the fact that there are very interesting family planning plays on the national radio, which are very popular among the people who gather around a radio to listen.

The findings show that the dissemination of FPI in the study area calls for the use of multiple delivery methods both indigenous (song, dance and drama) and modern communication channels (radio, television, posters, and other print materials) to reach out to a broader audience as suggested by Kiragu et al. (1996) and Kim et al. (2003). Rural communities are not homogeneous, there are socio-economic differentiation and they hold divergent opinions on issues. Therefore, the use of multiple mass-media channels may assist in reaching out to all groups of people. For example, women would prefer to meet the MCH clinic staff than listening to the radio, or men may prefer listening to the radio than going to meet the MCH clinic staff. Family Health International (1994) notes that the use of multiple channels to disseminate the family planning messages helps to ensure that the majority of the intended audience are exposed to the messages, and that many people will hear the same messages from multiple channels. Therefore, multiple exposures to family planning messages are a key factor in behaviour change among the general population.

Awareness and Knowledge of Family Planning Methods

Family planning information (FPI) should enable potential users gain knowledge of the various options available to plan spacing and number of children. The study examined the respondents' levels of awareness of the various FPMs, and results (Table 1) show that the level of awareness was very high for condoms (98%), calendar rhythm (92%), pills (88%) and female sterilisation (85%). High levels of awareness of condoms may be attributed to the HIV/AIDS campaigns, which promote the use of condom as a prevention strategy.

Table 1: Awareness of family planning methods (N=100)

Family Planning Methods	*(%)**
Condoms	98
Female sterilisation	88
Calendar rhythm	86
Pills	85
Depo-Provera	46
Intra-Uterine Device (IUD)	19
Withdrawal	17
Vasectomy	15
Jelly or Foam	7
Mucus	5
Tubal-ligation	0

* Percentage of the respondents

Use of Family Planning Methods

Investigation on the use of the FPMs showed that only 44% of the respondents were using FPMs to control births. Of these, 17% used the pill, 11% depo-provera injection, 9% condoms, 5% calendar rhythm, and 1% female sterilisation and intrauterine device. None used other methods (Table 2).

Table 2: Use of family planning methods (N=100)

Family Planning Methods	(%)*
Pills	17
Depo-Provera	11
Condoms	9
Calendar rhythm	5
Intra-Uterine Device (IUD)	1
Female sterilisation	1
Jelly or Foam	0
Tubal-ligation	0
Withdrawal	0
Mucus	0
Vasectomy	0

* Percentage of the respondents

These findings concur with those made by Chen and Guilkey (2003) that the use of FPMs in most areas of rural Tanzania was quite low. Furthermore, the use of the pill, Depo-provera injection and condoms as the main methods to control births, albeit at low levels, indicate that limited choices and options are available to rural clients. Ross et al. (2002) argue that limited choice of FPMs constrains the opportunity of couples to obtain a method that suits their needs resulting into low usage levels. The fact that over 50% of people lack adequate knowledge of FPMs and the apparent low levels of use of FPMs may be among the reasons why Kilombero District continues to exhibit high fertility rates. These findings corroborate those of a study on oral contraceptives in Vietnam which concluded that the major reason clients had never used a certain family planning method is that they had no knowledge about the method (Thang and Huong, 2001). Adequate knowledge of the various FPMs and options are critical for making informed decisions in the use of FPMs.

There are several reasons for the apparent low levels of usage of FPMs. Firstly, awareness does not guarantee usage. For instance, this study noted that high levels of awareness and availability of condoms in the study area are not reflected in levels of condoms use because condoms are mainly promoted as an HIV/AIDS prevention method rather than a FPM. It is equally important to understand that method availability is distinct from method use. The condom, for example, may be easily available but little used (Ross et al., 2002).

The second reason is lack of adequate information. Field observations in Kilombero District showed that inadequate information was provided at MCH clinics on the various options available and the advantages and disadvantages of each. This problem was also observed by Kopoka (1999) who argues that, one of the basic reproductive rights that is not being adequately provided to family planning users in Tanzania is "the right to proper, adequate information about FPMs that are being provided." Bruce (1990) emphasises that it is important to provide information about the range of methods available, their scientific documented contraindications, and the advantages and disadvantages associated with each method as clients would be more ready to adopt and use FPMs which they are adequately knowledgeable about.

A third reason is inadequate facilities and skills on the part of family planning service providers (in this case MCH clinic staff). "The competence and educational level of health providers available at a particular facility are likely to be important determinant of the choice of the method available there." (Speizer et al., 2000). The findings show that IUD use was very low; probably due to too few trained MCH clinic staff. Some of the methods cannot be situated at the dispensaries in the rural areas, for instance, IUDs and sterilisation methods, because of inadequate facilities and trained personnel (Kessy, 2001).

Factors which influence Access and Use of Family Planning

Although availability of FPS, proximity to service point and quality of FPI influence the use of FPMs, there are other factors which either facilitate or impede the access and use of FPMs. Respondents who were using FPMs (44%) were asked to state the reasons, which influenced their choice of FPMs. Those who were not using FPMs (56%) were also requested to state the possible reasons for not using FPMs (see Table 3).

Table 3: Factors responsible for the use of family planning methods (N=100)

Factors	Percentage frequency
Knowledge about family planning methods	24
Availability of family planning methods	23
Convenience	18
Husbands do not trust their wives	13
Influence from friend	6
Rumours that family planning causes cancer and sterility	5
Distance to the MCH clinic	3
A desire to have many children	2

From the results (Table 3), factors that enable access and use of FPMs include among others: availability of the FPMs, convenience, influence from a friend and knowledge of FPMs. These findings concur with those of Cohen (2000) who found that awareness and knowledge of family planning, accessibility and quality of FPS have independent influence and contribution to the use of FPMs. Grady et al. (1993) found evidence of the positive effects of ready access to FPI and services to be associated with family planning use effectiveness. Moreover, spatial proximity and convenience of the local family planning providing facility is an important determinant of family planning use and encourages use (Entwistle et al., 1997; Pullum, 1991).

The results also show that barriers to accessing and using FPMs include: inadequate family planning knowledge, lack of trust among couples, distance to service point, the need to have more children, and unavailability of the FPMs in the health facility. These findings corroborate WHO (2001), which suggested that possible factors that affect access and use of FPMs include: poor access to quality services, limited choice of methods, lack of information, concerns about safety or side-effects and partner disapproval. However, experts (Bruce, 1990; Young and Klingle, 1996) are of the opinion that most of these could however be reduced or eliminated if FPI delivery is made more conducive and user friendly. Bruce (1990) argues that FPI providers and sessions need to offer clients courtesy, respect, reassurance, and empathy in order to allay clients' concerns, increase clients' confidence in their choices, increase their satisfaction with services, and make it more likely that clients will use family planning. FPI delivery should be a two way process whereby clients and providers communicate openly, share information, and express emotions (Dimatteo, 1994). In the process, providers may identify and clear client doubts and reduce any unrealistic expectations, so that clients have a better understanding of their options and make more realistic choices (Young and Klingle, 1996).

The findings show that availability of a full range of FPMs would encourage continuous use of family planning in the surveyed area. Katende et al. (2003) suggest that "maintaining regular supplies of all family planning methods may be important in promoting and sustaining the use of modern family planning." Furthermore, location of a health facility is an equally important factor, which affects levels of access and use of FPMs. If the facility is located in a remote area which is difficult to reach, then access and use may be affected. These results confirm those of similar studies by Pullum (1991), Levin et al. (1999) and Magnani et al. (1999) who found that geographic proximity of the facility which provides FPS is an important determinant of family planning use. A nearby source can make a huge difference, as people are less likely to use FPMs if the travel time to clinics is long.

However, it should be noted that information and knowledge are very important factors among the various factors, which facilitate access and use of FPS. If people had information on the benefits of using family planning, they would become knowledgeable on different methods, their advantages and disadvantages, and it would then be easier for them to make informed choices and look for services, irrespective of other factors.

Strategies for Effective Dissemination of FPI

Access and use of FPI requires effective strategies for its dissemination to the target community. Respondents' opinion was sought on effective strategies for the dissemination of FPI. The recommended strategies include: design outreach programmes in the villages (48%); more family planning programmes on the radio (23%); use of drama (12%); use of posters and printed materials

to capture those who do not attend MCH clinics (14%) and FPI sessions during traditional initiation ceremonies (3%). On the other hand, health personnel (MCH clinic staff) recommended the need to create conducive environment for the dissemination of FPI by providing transport and adequate funds (40%); training MCH clinic staff (20%); involvement of local leaders (20%); monetary incentives (10%); and use of mass media (10%).

Access and use of FPI to promote reduction of fertility rates and population growth is a complex process, which needs both multiple sources and delivery method and multi-dimensional strategies to ensure efficacy. A proactive approach through outreach programmes, adequate funding, trained personnel and participation of leaders and target communities is critical for success. In Tanzania, like in many developing countries, the most successful programmes are those which have strong government support in terms of allocation of both financial and human resources and involvement of local leaders. This is particularly true in rural areas, because authority plays an important role in the lives of the rural population. The opinion of the local administrators and community leaders can be a determining factor in their reproductive behaviour (Haile et al., 2000). On the other hand, training family planning service providers (MCH clinic staff) in interpersonal communication skills is an important consideration for effective dissemination of FPI. For example, in Egypt, women who received counselling from FPS providers trained in interpersonal communication knew more about how to use their methods and expressed more satisfaction with services than those counselled by other FPS providers (Abdel-Tawab, 1993). In Ghana, specially trained FPS providers offered professional services on personal context of clients than providers who were not similarly trained (Hungtington et al., 1990). In Indonesia, FPS providers trained to foster rapport and encourage client participation doubled their facilitative communication in counselling, and clients asked twice as many questions (Kim et al., 2003). Therefore, in order to improve performance in the dissemination of FPI, it is very crucial to have short and long term training in interpersonal communication skills for family planning service providers.

Conclusions and Recommendations

The study revealed that socio-economic and demographic factors observed in the surveyed area have implications in the provision of FPI and in the use of FPS and FPMs. This situation is reflected in the observed high fertility rate. Although family planning services are available, they are mainly provided within the context of MCH services, and only about 69% of the surveyed population were aware of the availability of such services and less that 50% of them use the services. The main source of FPI was radio and MCH clinic staff. Radio was the most preferred source of FPI and the one which was considered most appropriate for delivery of FPI. Although indigenous media was preferred and considered appropriate by significant part of the rural populace in the study area, it is not used to deliver FPI.

The study further revealed that although there are high levels of awareness of the various FPMs, the majority lacked adequate knowledge of the various FPMs and, as a result, less than 50% of the people used them. The main methods used were the pill and Depo-provera injection indicating that the surveyed community had limited choice, which was also a constraint to use. Therefore, the apparent low levels of use of FPMs are responsible for the observed high levels of fertility in the study area. The study notes that there are various factors that influence access and use of FPI. Apart from proximity to service centres, funding and lack of adequate personnel, other factors include inconsistencies in service provision, convenience of both service and proposed methods, lack of trust, inadequate information on safety, insufficient knowledge about FPMs, and desire to have more children.

The study recommends that there is need to create conducive environment for effective dissemination of FPI in rural areas by establishing a proactive outreach programme, encouraging the use of multiple information sources for dissemination of FPI, ensuring adequate funding and trained personnel. Others include: establishing more health service facilities, raising public awareness on family planning issues and ensuring constant availability of all the FPMs, raising educational levels and standards living though interventionist programs.

Furthermore, information professionals need to work together to create opportunities for the improvement and dissemination of family planning information from a variety of sources. This should take into consideration the rural people information source preferences, so as to reach all target groups of people in rural areas.

References

Abdel-Tawab, N. (1993). *The Clinical Services Improvement Project (PCSI) Counselling Training Program: Impact on Providers and Clients in Egypt*. Baltimore: Johns Hopkins School of Public Health, 39p.

Beegle, K. (1994). *The Quality and Availability of Family Planning Services and Contraceptive use in Tanzania*. Washington, DC: World Bank.

Betrand, J.T.E., Magnani, R.J. and Angle, M.A. (1995). Access, Quality of Care and Medical Barriers in Family Planning Programmes. *International Family Planning Perspectives*, 21 (2) 64-74.

Bongaarts, J. and Bruce, J. (1995). The Causes of Unmet Need for Contraception and the Social Content of Services. *Studies in Family Planning*, 26(2) 57-75.

Brown, L.R., Gardner, G., and Halweil, B. (1999). *Nineteen Dimensions of the Population Challenge*. New York: W.W. Norton & Co., 167p.

Bruce, J. (1990). Fundamental Elements of Quality of Care: A Simple Framework. *Studies in Family Planning*, 21 (2) 61-91.

Chen, S. and Guilkey, D. (2003). Determinants of Contraceptive Method Choice in Rural Tanzania between 1991 and 1999. *Studies in Family Planning*, 34 (4) 263-276.

Cohen, B. (2000). Family Planning Programmes, Socioeconomic Characteristics, and Contraceptive Use in Malawi. *World Development*, 28: 843-60.

Dimatteo, M.R. (1994). The Physician-Patient Relationship: Effects on the Quality of Health Care. *Clinical Obstetrics and Gynaecology*, 37 (1) 149-161.

Entwistle, B., Rindfuss, R.R., Walsh, S.J., Evans, T.P. and Curran, S.R. (1997). Geographic Information Systems, Spatial Network Analysis, and Contraceptive Choice. *Demography*, 34: 171-86.

Family Health International [FHI], (1994). Maximizing Access to Quality Family Planning and Reproductive Health Services. Research Triangle Park, North Carolina: Family Health International, 2p.

Grady, W.R., Billy, J.O.G. and Klepinger, D.H. (1993). The Influence of Community Characteristics on the Practice of Effective Contraception. *Family Planning Perspectives*, 25 (1) 4-11.

Haile, S., Guerny, J.D. and Stloukal, L. (2000). Provision of Reproductive Health Services in Sub-Saharan Africa: Lessons, Issues, Challenges and the Overlooked Rural Majority. Sustainable Development Department, FAO SD Dimensions.

Hall, G.B. and Bowerman, R.L., (1996). Using GIS to Evaluate the Accessibility of Family Planning Services in the Central Valley of Costa Rica. *ITC Journal*, 1: 38-48.

Huntington, D., Lettenmaier, C. and Obeng-Quaidoo, I. (1990). User's Perspective of Counselling Training in Ghana: The "Mystery Client" Trial. *Studies in Family Planning*, 21 (3) 171-177.

Jato, M.N., Simbakalia, K., Tarasevich, J.M., Awasum, D.N., Kihinga, C.N.B. and Ngirwamungu, E. (1999). The Impact of Multimedia Family Planning Promotion on the Contraceptive Behaviour of Women in Tanzania. *International Family Planning Perspectives*, 25 (2) 60-67.

Katende, C., Gupta, N. and Bessinger, R. (2003). Facility-Level Reproductive Health Interventions and Contraceptive Use in Uganda. *International Family Planning Perspectives*, 29 (3) 130–137.

Kessy, F.L. (2001). The Role of Quality of Care in the Demand For Family Planning Services in Tanzania. PhD Thesis. Urbana-Champaign: University of Illinois.

Kim, Y.M., Lettenmaier, C.L., Odallo, D., Thuo, M. and Khasiani, S. (1996). Haki Yako: A Client-Provider Information, Education, and

Communication Project in Kenya. Johns Hopkins School of Public Health, Centre For Communication Programs, IEC Field Report Number 8.

Kim, Y.M., Kols, A., Thuo, M., Mucheke, S. and Odallo, D. (1997). Client-Provider Communication in Family Planning: Assessing Audio Taped Consultations from Kenya. Johns Hopkins School of Public Health, Centre For Communication Programs, Working Paper No. 5.

Kim, Y.M., Kols, A., Putjuk, F., Heerey, M., Rinehart, W., Elwyn, G., and Edwards, A. (2003). Participation by Clients and Nurse Midwives in Family Planning Decision Making in Indonesia. *Patient Education and Counselling*, 50 (3) 295-302.

Kiondo, E. (1998). Access to Gender and Development Information by Rural Women in the Tanga Region, Tanzania. PhD thesis. Pietermaritzburg: University of Natal.

Kiragu, K., Krenn, S., Kusemiju, B., Ajiboye, J.K.T., Chidi, I. and Kalu, O. (1996). Promoting Family Planning Through Mass Media in Nigeria: Campaigns Using Public Service Announcements and a National Logo. Johns Hopkins School of Public Health, Centre For Communication Programs, Field Report Number 5.

Kopoka, P.A. (1999). Family Planning and Reproductive Rights in Tanzania. Paper Presented at the Annual Seminar on *"Gender, Equity, Equality and Women Empowerment"* University of Dar-es-Salaam, Dar-es-Salaam, Tanzania, 7-8 September, 1999.

Levin, A., Bruce, C. and Barkat-e, K. (1999). Effect of Price and Access on Contraceptive Use. *Social Science and Medicine*, 49 (1) 1-2.

Magnani, R.J., Hotchkiss, D.R., Florence, C.S. and Shafer, L.A. (1999). The Impact of Family Planning Supply Environment on Contraceptive Intentions and Use in Morocco. *Studies in Family Planning*, 30 (2) 120-132.

Pullum, T.W. (1991). The Relationship Between Service Availability and Contraceptive Use in Rural Guatemala. Demographic and Health Surveys Working Paper Series, No. 2. Columbia, Maryland: Institute for Resource Development/ Marco International Inc.

Ross, J., Hardee, K., Muford, E. and Eid, S. (2002). Contraceptive Method Choice in Developing Countries. *International Family Planning Perspectives*, 28 (1) 31-33.

Sherpa, H. and Rai, D. (1997). Safe Motherhood: It is a Family Responsibility. Report on National Safe Motherhood Awareness Campaign, March 8, 1997. Safe Motherhood at the Family and Community, and Community Support Network, 73p.

Speizer, I.S., Hotchkiss, D.R., Magnani, R.J., Hubbard, B. and Nelson, K. (2000). Do Service Providers in Tanzania Unnecessarily Restrict Clients' Access to Contraceptive Methods? *International Family Planning Perspectives*, 26 (1) 13-20.

Tapsoba, P., Miller, R. and Ralalahariventy, L.R. (1993). Involving Husbands to Increase the Acceptability of Norplant in Antananarivo, Madagascar. Paper Presented at the 121st Annual Meeting of the American Public Health Association, San Francisco, California, October 24–28, 1993, 12p.

Tefere, A. and Larson, C.P. (1993). Randomized Trial of Modern Contraception Utilization: Do Husbands Make a Difference? *American Journal of Public Health*, 83: 1567-1571.

Thang, N.M. and Anh, D.N. (2002). Accessibility and Use of Contraceptives in Vietnam. *International Family Planning Perspectives*, 28 (4) 214-219.

Thang, N.M. and Huong, V.T. (2001). The Oral Contraceptive Pills in Vietnam: Situation, Client Perspectives and Possibility for Promotion. *Asia-Pacific Population Journal*, 16 (4) 31-48.

United Republic of Tanzania [URT], (1997). *Tanzania Demographic and Health Survey 1996*. Dar es Salaam: National Bureau of Statistics and Macro International Inc.

United Republic of Tanzania [URT], (2003). *2002 National Population and Housing Census: General Report*. Dar es Salaam: National Bureau of Statistics, 203p.

United Nations Fund for Population Activities [UNFPA], (1997). The State of World

Population. The Right to Choose: Reproductive Rights and Reproductive Health. New York: UNFPA, 76p.

United Nations Population Division, (2005). *World Population Prospects: The 2004 Revision Highlights*. ESA/P/WP.193. New York: United Nations, Department of Economic and Social Affairs, Population Division.

Upadhyay, U.D. (2001). Informed choice in family planning: Helping people decide. Johns Hopkins School of Public Health, Population Information Program, *Population Reports*, Series J, No. 50.

Upadhyay, U.D. and Robey, B. (1999). Why Family Planning Matters. Johns Hopkins School of Public Health, Population Information Program, *Population Reports*, Series J, No. 49.

Valente, T.W., Kim, Y.M., Lettenmaier, C., Glass, W. and Dibba, Y. (1994). Radio Promotion of Family Planning in the Gambia. *International Family Planning Perspectives*, 20 (3) 96-100.

Wang, C.C., Vittinghoff, E., Hua, L.S., Yun, W.H. and Rong, Z.M. (1998). Reducing Pregnancy and Induced Abortion Rates in China: Family Planning with Husband Participation. *American Journal of Public Health*, 88: 646-648.

World Bank, (1999). *World Development Report 1999/2000 - Entering the 21st Century*. New York: Oxford University Press 300p.

World Bank, (2003). *World Development Indicators*. Washington, DC: World Bank.

World Health Organisation [WHO], (2001). *Improving Access to Quality Care in Family Planning: Medical Eligibility Criteria for Initiating and Continuing Use of Contraceptive Methods*. Geneva: WHO, 147p.

Young, M. and Klingle, R.S. (1996). Silent Partners in Medical Care: A Cross-Cultural Study of Patient Participation. *Health Communication*, 8: 29-53.

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