

# The impact of collaboration and family planning counseling in the community setting

Chigbu B, Onwere S, Feyi-Waboso P, Kamanu C, Aluka C, Ezirim O, Okoro O, Akwuruoha E

Department of Obstetrics and Gynecology, Abia State University Teaching Hospital, Aba, Nigeria

## Abstract

**Background:** Since uptake of family planning methods is influenced by poor knowledge of modern contraceptive methods and by cultural beliefs and community opinions, there may be benefit in having the counseling on offer from someone who lives within the community he/she serves, and who is cognizant of the nature of local concerns. **Objective:** To assess the impact of collaboration between a private health care facility, a non-governmental organization, and community health care workers on the uptake of modern methods of contraception by women in the rural community of Ekeakpara in Osisioma Ngwa LGA of Abia State, Nigeria. **Design:** A cross-sectional study. **Setting:** A health care facility. **Subjects:** All acceptors of modern methods of contraception at the facility from January 2004 to December 2006, and from June 2010 to May 2012. **Materials and Methods:** Contraceptive uptake between two periods (January 2004 - December 2006 and June 2010 - May 2012) was compared. Qualitative data on acceptors of contraception between June 2010 and May 2012 were collected using in-depth interviews. **Results:** Mean age of the women was 33.4 years. Majority (38%) of the women had only primary education. Their parities ranged from 1 to 10 with a mean parity of 5.1. With community mobilization, the women acceptance and attitude to modern methods of contraception was better than previously. Prior to community mobilization, 13 out of 30 women in need of permanent limitation of their family size chose injectable contraceptives. With community mobilization, majority of the women (120 out of 122) in need of permanent limitation of their family size opted for either the long-acting reversible contraceptive methods or bilateral tubal ligation. **Conclusion:** The positive impact of community mobilization in collaboration with an NGO as exemplified in this study suggests the need to encourage donors, governments, and the private sector to increase resources to fund family planning in rural communities in Nigeria.

**Key words:** Collaboration, Community health worker, Family planning uptake, Rural Nigeria

## INTRODUCTION

Family planning is hailed as one of the great public health achievements of the last century, and yet the number of women who do not have access to an effective method of family planning remains unacceptably high. It is estimated that over 200 million women worldwide who want to use

contraceptives do not have access to them.<sup>[1]</sup> Less than 20% of women in sub-Saharan Africa use modern contraceptives.<sup>[2]</sup> The world's poorest women are not empowered to decide the number of children and timing of their births. As a result, each year, complications during pregnancy and childbirth are a leading cause of death for women in Africa.<sup>[3]</sup> It is estimated that providing these women with access to modern contraceptives would reduce maternal deaths by 25%, newborn deaths by 18%, and unintended pregnancies by 75%.<sup>[4]</sup> Voluntary family planning no doubt has profound health, economic, and social benefits for families and communities.

High uptake of family planning services is naturally associated with local availability of good reproductive health services. The least served appear to be the rural poor, remote from

Access this article online	
Website: www.jomip.org	Quick Response Code 
DOI: 10.4103/9783-1230.132552	

### Address for correspondence:

Dr. Bright Chigbu, Department of Obstetrics and Gynecology, Abia State University Teaching Hospital, PMB 7004, Aba, Nigeria. E-mail: chigbub@yahoo.com

such health facilities, which suggest a central future role for community health workers in further efforts to ameliorate this situation. Uptake of family planning methods is influenced not only by poor knowledge of modern contraceptive methods, but also importantly by cultural beliefs and community opinions.<sup>[5]</sup> In such a situation, there may be remarkable benefit in having the counseling on offer from someone who lives within the community he/she serves, and who thus will be cognizant of the nature of local concerns.

Between 2010 and 2012, a non-governmental organization (NGO) collaborated with a private health care facility in a rural community of Ekeakpara in Osisioma Ngwa Local Government area (LGA) of Abia State to increase access to and generate informed demand for long term, reversible child spacing methods, particularly intrauterine contraceptive devices (IUDs) and hormonal implants under a nationwide project called the Women's Health Project (WHP). The project involved the use of female community health workers to provide relevant information and help mobilize women in the communities in favor of the positive attitudes and practices promoted by the project.

The analyses presented in this paper document the impact of such collaboration and community mobilization effort on the uptake of modern methods of contraception by women visiting a rural private health care facility at Osisioma Ngwa LGA of Abia State. We believe that the results would prove valuable for making recommendations regarding how to scale up contraceptive uptake of women in rural Nigeria.

## MATERIALS AND METHODS

In 2010, a memorandum of understanding was signed between the Society for Family Health (SFH) and Ihunanya clinic, a 15-bedded private health care facility located at Ekeakpara in Osisioma Ngwa Local Government Area, 4 kilometers from Aba, Abia State, Nigeria. The health facility is managed by a gynecologist and 2 registered staff nurse midwives. SFH supported the facility with training in balanced counseling strategy and post-abortion care, provision of family planning tool kits and two community health workers resident in the rural community of Ekeakpara. Family planning services were offered to the women at a reduced cost.

The contraceptive uptake of women at the clinic over a period of 3 years (January 2004 – December 2006) was analyzed and compared with the contraceptive uptake and experience of the women during the period of collaboration with SFH (June 2010 – May 2012). A qualitative part of the study consisted of in-depth interviews with postnatal and family planning clinic attendees at the facility between June 2010 and May 2012. The interview was a face to face interview lasting a period of 10 minutes. An in-depth interview guide translated in Igbo dialect was used to conduct the interviews. The guide solicited mainly open-ended questions on respondents' perceptions regarding the modern methods of contraception, the importance of family planning, and barriers to the uptake

of modern methods of contraception in the community. In all, 150 in-depth interviews were conducted, and these clients were part of the 180 new acceptors of contraception at the facility between June 2010 and May 2012. A family planning client record card was administered by the nurses to all new acceptors of family planning methods at the clinic. The client record card contained information on the demographic characteristics of the women, parity, birth interval, knowledge of family planning methods, their source of information on family planning, reasons for family planning, prior use of contraceptive methods, history of vaginal bleeding, and the medical history of the women. Qualitative data were analyzed for content, pattern, and meaning, while quantitative data were analyzed with Epi info version 6 (U.S. Centers for Disease Control and Prevention Atlanta, GA). Statistical comparisons were made with Chi square test or Student's t-test as appropriate.

## Ethics

The Ethics and Research Committee of the Abia State University Teaching Hospital, Aba gave approval for the conduct of the study.

## Result of in-depth interviews

In response to the question "what are your views regarding the safety and efficacy of modern methods of family planning"? A 35-year-old married woman replied:

...My fears concerning the various methods of contraception have been allayed by the discussion with the community health worker. Now I know that modern methods of family planning are safe and effective.

Majority of the women also held similar views.

Another (a 30-year-old woman) answered in a similar manner:

They said Cu T IUD does not work and that most times, the babies hold it in their hand as they are born. But that is not true. I understand, it is possible that such women were already pregnant before accepting the IUD.

In reply to the question "what is the usefulness of modern methods of family planning"? A 20-year-old woman answered as follows:

Family planning can help a couple to space child birth to between a year and six months and two years interval.

Another, a 25 year old woman, reacted as follows:

Family planning will help you have as many children as you and your husband can care for.

A 28-year-old woman was more realistic when she replied this way:

Family planning can help you plan to get pregnant when you want to and not by accident.

With respect to unplanned pregnancies, the women believed that unplanned pregnancies are big problems.

A 32-year-old woman said:

Even married people find unplanned pregnancy a big problem; it destabilizes an individual.

Another 26-year-old woman narrated her experience as follows:

For fear of the possible side-effects of methods of contraception, I refused to use any and experienced many unplanned pregnancies and induced abortions, which left me with a feeling of guilt. I used to take white quinine, Andrews liver salt, and dry gin as emergency prevention after sex with my husband when am not safe, but they never worked.

On the side effects of modern methods of contraception, many women believed that from what they have learnt about the various methods of contraception, side effects are tolerable. In the opinion of one woman,

...the side effects are tolerable, manageable, and temporary; besides, one can always discontinue a method and switch to another method.

A 29-year-old woman said:

The side effects may depend on the method and must be minimal because I was on CuT IUD for 3 years before deciding to have my third baby, and I experienced no problems with it. Now I want to have the IUD again.

### Sources of awareness of the methods of contraception

Amongst the 150 clients interviewed, friends were the leading source of initial information (40%), followed by radio drama (30%), and followed by the community health worker (30%).

### Barriers to the uptake of modern methods of contraception in the community

Fear of side effects was related by more than half (76 out of 150) of the respondents as a reason for avoiding contraception. Many respondents (50 out of 150) attributed cost as a barrier to their uptake of modern contraception. Some of the women (40 out of 150) complained about lack of spousal support, and 30 out of 150 reported religious beliefs about contraception as barriers. These women believed that contraception was unnecessary interference with the biblical command to humans to reproduce and fill the earth.

### Results of quantitative data analysis

From the year 2004 to 2006, during which period there was no community mobilization, the new acceptors of available methods of contraception at the facility were 69 women whilst between 2010 and 2012, during which period there was community mobilization and collaboration with an NGO, there were 180 new acceptors of contraceptives at the facility,

and the difference was statistically significant ( $P = 0.0002$ ). The ages and marital status of the women are presented in Table 1. The mean age of the women was  $33.4 \pm 5.2$  years. There was no statistically significant difference in the ages of the groups of women studied. More than 80% of the total population of the women studied was married. The level of education and parity of the women are presented in Table 2. There was no statistically significant difference in the level of education and parity of the women studied. Majority (38%) of the women had only primary education. Their parities ranged from 1 to 10 with a mean parity of 5.1. The uptake of various methods of contraception by the women is shown in Figure 1. With community mobilization, the rural women acceptance of the long term reversible methods of contraception was higher than previously. Tables 3,4 show the relationship between the needs of the women and their choice of contraception. Prior to the period of community mobilization, many (13 out of 30) who were in need of permanent limitation of their family size were relying on injectable contraceptives. On the other hand, with community mobilization, the vast majority of the women (120 out of 122) who were in need of permanent limitation of their family size opted for either the long-acting reversible contraceptive methods or bilateral tubal ligation.

## DISCUSSION

Family planning is one of the best investments Nigeria can make in its future. The average parity of 5.1 amongst the rural women in this study agrees with the findings by the Nigerian Demographic and Health Survey (NDHS) of 2008, that Nigeria has a high total fertility rate (TFR) of 5.7.<sup>[6]</sup> This means that at current fertility levels, the average Nigerian woman who is at the beginning of her childbearing years will give birth to 5.7 children by the end of her life time. Nigeria like most countries in sub-Saharan Africa is experiencing rapid population growth. There is a crucial need to keep the population growth within acceptable limits. The continuing

**Table 1: Age distribution and marital status of the contraceptive acceptors**

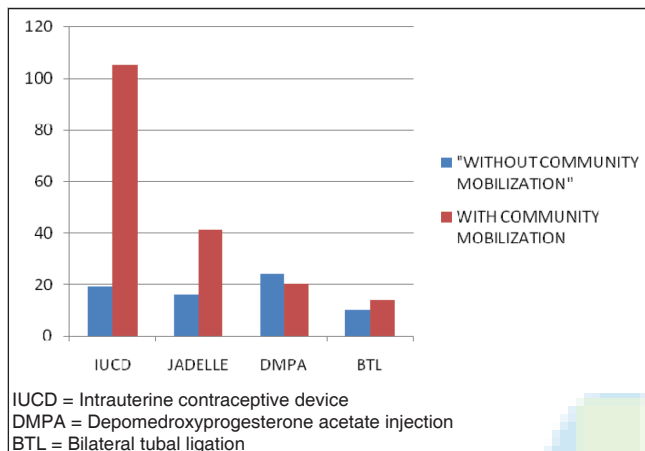
Age (years)	2004-2006 (N = 69)	2010-2012 (N = 180)	OR	P**
19-23	4 (5.8%)	4 (2.2%)	2.61 (0.53-12.83)	0.23
24-28	12 (17.4%)	26 (14.4%)	1.20 (0.54-2.66)	0.76
29-33	26 (37.7%)	68 (37.8%)	1.00 (0.57-1.75)	0.89
34-38	15 (21.7%)	70 (38.9%)	0.56 (0.29-1.08)	0.08
39-43	10 (14.5%)	10 (5.6%)	2.61 (0.95-7.14)	0.06
44-48	2 (2.9%)	2 (1.1%)		
Marital status				
Married	60 (87%)	145 (80.6%)	1.08 (0.70-1.66)	0.79
Single	3 (4.3%)	5 (2.8%)	1.57 (0.29-7.78)	0.69
Widowed	6 (8.7%)	30 (16.7%)	0.52 (0.19-1.39)	0.22

\*\*Fisher exact test and Yates correction used

**Table 2: Level of education and parity of the contraceptive acceptors**

Level of education	2004-2006 (N=69)	2010-2012 (N=180)	OR	P**
No formal education	12 (17%)	50 (27.8%)	0.63 (0.30-1.30)	0.24
Primary education	30 (43.5%)	65 (36.1%)	1.20 (0.70-2.08)	0.56
Secondary education	20 (29%)	45 (25%)	1.16 (0.61-2.19)	0.74
Tertiary education	7 (10.1%)	20 (11.1%)	0.91 (0.33-2.41)	0.98
Parity				
1-2	2 (2.9%)	10 (5.6%)	0.52 (0.08-2.63)	0.52
3-4	25 (36.2%)	51 (28.3%)	1.28 (0.71-2.30)	0.47
5-6	32 (46.4%)	64 (35.6%)	1.30 (0.76-2.23)	0.37
7-8	6 (8.7%)	37 (20.6%)	0.42 (0.15-1.11)	0.09
9-10	4 (5.8%)	18 (10%)	0.58 (0.16-1.91)	0.47

\*\*Fisher exact test and Yates correction used

**Figure 1: Uptake of various methods of available contraceptives by the women**

growth of the world population has become an urgent global problem. By 2050, the global population is expected to grow to over 9 billion people, an increase of more than 50% over 2005 levels.<sup>[7]</sup> This growth will only exacerbate the current health inequities for women and children, put pressure on social services and resources, and contribute significantly to the global burden of disease, environmental degradation, poverty, and conflict.<sup>[8]</sup>

It is estimated that Nigeria has an estimated unmet need for family planning at 20%, a contraceptive prevalence rate of 14.6% for any contraceptive method and 9.7 percent for modern contraceptives.<sup>[6]</sup> Hence, decision-makers in the area of family planning in Nigeria require information on ways to scale up contraceptive uptake in Nigeria so as to be able to make appropriate decisions for improved delivery and use of modern contraceptives in the country.

Mass advocacy has been carried out for the use of modern contraception all over the developing world including Nigeria. International development partners and UN bodies support many of these, hence the universally high awareness of these methods as shown by studies elsewhere<sup>[9]</sup> and supported by the findings in the qualitative part of this study. Why then the low utilization of modern contraceptive methods in sub-Saharan Africa? This is perhaps because most advocacy work has concentrated in the cities with little fieldwork in the larger rural

**Table 3: Relationship between the indication for contraception and the choice of method by the 69 new acceptors of contraception between 2004 and 2006**

Indication	Accepted DMPA	Accepted other methods	$\chi$ -value	P-value
Child spacing	11	15	0.58	0.46NS
Permanent limitation	13	30		

NS = Not significant

**Table 4: Relationship between the indication for contraception and the choice of method by the 180 new acceptors of contraception between 2010 and 2012**

Indication	Accepted DMPA	Accepted other methods	$\chi$ -value	P-value
Child spacing	18	40	31.48	< 0.000*
Permanent limitation	2	120		

\*Statistically significant

population. Furthermore, awareness is valuable only if the information obtained is correct and utilized. Friendly, trained community health workers as exemplified in this study can visit the clients on a regular basis to address, in a way in which clinics may not, important issues relating to compliance and continuation. The findings in this study reveal that prior to the collaboration with the NGO and involvement of community health workers, there was a mismatch of services and needs both for younger and older women. Clearly, it does not make sense to have older women with high parity still relying on two or three-monthly injectable contraceptives with risks of stock outs and poor compliance where their real need is for long-acting methods that are sustainable within the health system. With collaboration with the community health workers, it was possible to tailor the family planning services to the needs and benefits of the rural women.

Majority of the rural women in this study had either a primary education or no formal education and the vast majority married. Studies elsewhere indicate that education and marital status are strong influences on the use of contraceptives.<sup>[9]</sup> Important considerations amongst the respondents in choosing a method were its effectiveness and cost. This is an expression of their desire to avoid pregnancy and their poor socio-economic status. Some of the women reported that one of the major threats to their reproductive health lies in the decision to terminate an unwanted pregnancy, and this agrees with findings by authors



elsewhere<sup>[10]</sup> and indicates the need to provide the women with effective methods of family planning.

In view of the essential role of community health workers in the effort to win rural communities for family planning, and given the complex nature of family planning counseling, we recommend good training for the community health workers. Without good training, it can be difficult to judge how much information is required to assist a potential user in choosing a method. Providing much information can quickly become overwhelming for a client. On the other hand, restricting the information given can impinge on the possibility of informed consent.

## CONCLUSION

As family planning is indispensable to achieving the Millennium Development Goals (MDGs), the positive impact of community mobilization in collaboration with an NGO as exemplified in this study support the need to encourage donors, the civil society, governments, and the private sector to increase resources to fund family planning. The implants are currently costly for the rural women who use them. There is need for price reduction for developing countries. Reaching the millions of women of the world who desire effective family planning methods requires the dedication of all of our government, donor, private sector, research, nongovernment, and community partners. Finally, we wish to advocate for community-based family planning programs in rural south eastern Nigerian.

## Limitations of the study

There were few limitations in this study. The study targeted women exclusively. There is need for projects and programs that foster conversations about men in family planning. Men's involvement in family planning can advance gender equality and increase contraceptive uptake. The study did not explore the rural women's need for emergency contraception. Furthermore, the small sample size and the homogeneity of the study population may also affect the generalizability of the results.

## ACKNOWLEDGEMENT

We wish to acknowledge the invaluable support of the Society for Family Health for providing technical support for this study. The findings and conclusions are those of the authors and do not necessarily represent the views of the society for family health.

## REFERENCES

1. Singh SJ, Ashford DL, Vissoff M. Adding it up: The Costs and Benefits of Investing in Family Planning and Maternal and Newborn Health. New York: Guttmacher Institute and United Nations Population Fund; 2009.
2. World Population Data Sheet – Population Reference Bureau. Available from: <http://www.prb.org/pdf/11/2011-population-data-sheet>
3. World Health Organization. Maternal Mortality in 2000. Estimates developed by WHO, UNICEF, and UNFPA. Geneva: WHO; 2004. Available from: <http://www.who.int/reproductivehealth/publications/monitoring>.
4. Guttmacher Institute. Facts on Investing in Family Planning and Maternal and Newborn Health 2010. Available from: <http://www.guttmacher.org/pubs>
5. Sharma V, Sharma A. Training of opinion leaders in family planning in India: Does it serve any purpose?. *Rev Epidemiol Sante Publique* 1996;44:173-80.
6. National Population Commission (NPC) and ICF Macro 2009. Nigeria Demographic and Health Survey key findings 2008. Available from: <http://www.measuredhs.com/pubs>
7. United Nations. World population to exceed 9 billion by 2050 (press release). Available from: <http://www.un.org/esa/population/publication>.
8. Bill and Melinda Gates foundation. Family Planning Strategy Overview. Global Health Program. Available from: <http://www.gatesfoundation.org>
9. Beekle AT, McCabe C. Awareness and determinants of family planning practice in Jimma, Ethiopia. *Int Nurs Rev* 2006;53:269-76.
10. Omo-Aghoja LO, Omo-Aghoja VW, Okonofua FE, Aghedo O, Umueri C, Otayohwo R, *et al.* Perceptions and attitudes of a rural community to abortion in the Niger-delta region of Nigeria. *Niger J Clin Pract* 2009;12:443-9.

**How to cite this article:** Chigbu B, Onwere S, Feyi-Waboso P, Kamanu C, Aluka C, Ezirim O, *et al.* The impact of collaboration and family planning counseling in the community setting. *J Med Investig Pract* 2014;9:16-20.  
**Source of Support:** Nil, **Conflict of Interest:** None declared.