The Contribution of Community Health Workers to the Use of Modern Family Planning Methods in Huye District case of Ruhashya Health Center

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Abstract

Although Rwanda has initiated the program of Community Health Worker (CHWs) in 1995 with the objective of delivering the first level of entry to the health system, with its evolution and the package of activities and many more including modern family planning methods. The Community Health Workers (CHWs) are now providing also some modern family planning methods, but we don't know how far they are with the program in terms of quality and quantity of the service delivered. The study took a place at Ruhashya health center with the objectives of finding out the modern family planning methods used in HUYE district, highlighting the prevalence use of modern family planning methods before and after contribution of CHWs in Huye District and assessing the effectiveness of CHWs to the use of modern family planning methods in Huye District. Methodology focused on users of Family Planning who are from the catchment area of Ruhashya health center, and Community health workers who are usually providing this service; questionnaire and interview have been used. The Results showed that the users of Modern FP methods in Ruhashya heath Center opt for the long-acting reversible contraceptive methods among which the CHWs provide injections, pills, condoms and counseling about other methods in a very effective way. The prevalence of these used modern family planning methods increases year by year as per the program of Community Based Provision (CBP) in Ruhashya who started from 70 to 80%. The acceptance of the long term reversible methods of FP is higher than previously. Most of Community Health Workers have completed quality service they perform. They are an important source of information about modern FP methods as they are appreciated by the FP users at 72 % for quality service they deliver.

Key Words: Community Health Workers, Modern Family Planning Methods, Ruhashya health center

1. Introduction

Family planning has been proven to save and enhance the lives of women, children, and number of families. It reduces the unintended. unwanted. and mistimed pregnancies. Women who control their fertility have fewer unsafe abortions, thereby saving mothers' lives. Family planning allows women to space births, and longer birth intervals reduce maternal and infant mortality rates (White and Speizer, 2007).

It is important that family planning is widely available and easily accessible through midwives and other trained health workers to anyone who is sexually active, including adolescents. Trained community health workers, also provide counseling and some family planning methods, for example pills and condoms. With the help of mentioned trained health workers, contraceptive use has increased in many parts of the world, especially in Asia and Latin America, but continues to be low in sub-Saharan Africa. Globally, use of modern contraception has risen slightly, from 54% in 1990 to 57% in 2012. Regionally, the proportion of women aged 15-49 reporting use of a modern contraceptive method has raised minimally between 2008 and 2012. In Africa it went from 23% to 24%, in Asia it has remained at

62%, and in Latin America and the Caribbean it rose slightly from 64% to 67%. There is with significant variation among countries in these regions (WHO, 2013).

Africa is home to dozens of programmes for community-based distribution of contraceptives. However, the popularity and impact of programmes that use paramedical workers to distribute condoms and oral contraceptive pills may be limited by the fact that none supply the most popular family planning method in sub-Saharan Africa: injectable progestin-only contraceptives such as depot medroxyprogesterone acetate (DMPA).

Though practically unknown on the continent before the 1990s, injectable contraceptives have rapidly become the region's method of choice due to their effectiveness, their simple re-injection schedule every three months for Depot Medroxyprogesterone Acetate (DMPA) and their suitability for discreet use (J. Stanback, A. Mbonye and M. Bekiita, 2007).

Community health workers routinely provide vaccinations in Africa and give contraceptive injections in some developing regions. Bangladesh, for example, began a programme to provide Depo Provera and

other methods in clients' homes in 1976. The programme was credited with reducing fertility rates by 25% compared with areas where use of Depot Medroxyprogesterone Acetate was rare (J. Philips et al. 1982).

More recently, community-based family planning programmes in Bolivia, Guatemala, Mexico and Peru successfully added injectable contraceptives to the method mix offered too many of their rural clients (McCarraher D, Bailey P. Bolivia, 2000).

As Rwanda is Africa's most densely populated country, the Government has recognized that facilitating rational population growth is the key to its economic development. The Government of Rwanda (GOR) has set a target of achieving 70% contraceptive prevalence by 2018. Among other strategies, the GOR is working to increase access to modern contraceptive services by bringing them closer to the population. To this end, the Ministry of Health adopted a strategy of using community health workers in the delivery of Family Planning (FP) services at the village (Imidugudu). Community-based level provision (CBP) of family planning services (including commodities) is a strategy for increasing access to family planning that has been adopted in many countries, for example,

Madagascar, Malawi. Zimbabwe Ethiopia. Rwanda Ministry of Health policies authorize community health workers to sensitize their communities about the impact of population growth and provide: condoms, oral contraceptive pills, injectables, and the Standard Days Method. However, Community Health Workers are only allowed to give resupplies to Family Planning (FP) clients who have already been initiated on the method by a health provider. CHWs are also trained to refer clients to the health center in the case of any suspected side effects.

In July 2010, 3061 CHWs were trained in Community-based provision (CBP) in the three districts. 82% of the CHWs trained have been certified to provide injectable contraceptives. Service provision began in December 2010. In the first seven months of service provision 70,308 clients were served with a contraceptive method in the three districts. Over half of clients (57%) received injectable, 27% received oral contraceptive pills, 16% received condoms, and 1% received Standard Days Method (J. Wesson et al. 2011).

Although Rwanda has initiated the program of Community Health Worker after Genocide against Tutsi in 1995 with the objective of delivering the first level of entry to the health system, with its evolution and different tasks

and the package of activities including nutrition education, Direct Observation Treatments(DOTs) for Tuberculosis (TB), community case management of Malaria, diarrhea, vaccination and malnutrition, community mobilization and sensitization, health campaign on hygiene and sanitation, immunization, education for prevention of sexual transmitted infections, growth monitoring particularly among children under five years old and many more, the CHWs are now providing also some modern family planning methods but we don't know how far they are with the program in terms of quality and quantity of the service.

2. Material and Methods

The researchers obtained the material for this study from primary and secondary data covering the following databases: various books, journals and relevant reports to the topic.

This study was done in Ruhashya sector, Huye district, in its health center located in the zone of Kabutare Hospital. The Ruhashya health center serves 21595 populations. Therefore, the study population is the couples enrolled in family planning program and the target population comprises all population from the catchment area of the above health

center who is in reproductive age, means age between 15 and 49.

This study is designed under the number of groups to be studied and the timing of data collection. We have used descriptive study design with qualitative and quantitative approaches in order to assess the contribution of community health workers to the scaling up the use of modern family planning methods in Huye district. About the size of sample we preferred to use the formula attributed to COCHRAN, applied when the universe is less than 1000000 individuals. (Bartlettuet al. 2000) and this sample has been selected randomly.

NC = (N*n)/(N+n)

NC= Sample size corrected

N= Universe size (4966 individuals in our case study)

n = Sample size for universe fined which corresponds to 96 individuals

Thus, for our case study, the sample size is NC = (4966*96)/(4966+96) = 94 plus 14 representing CHWs (binomes) who give the methods. The total is 108.

Questionnaires have been personally distributed by the researchers to couples

enrolled in family planning program. The researchers completed the questionnaires for those who eventually cannot read. The researchers reached respondents at their homes. To access information on family planning at the Health Centers, the researchers requested permission from the health center managers.

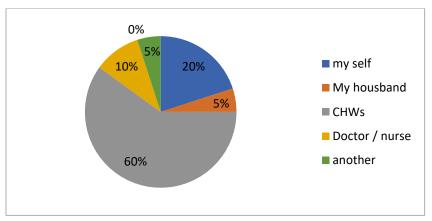
Quantitative variables (numerical discrete variables) and qualitative variables (binary variables) have been used. We have used primary quantitative data which contain numbers from measurements of quantitative variables, and primary qualitative data which contain no numbers that can be used to get the mean, and are obtained from qualitative

variables. Secondary data have also been used to formulate the problem statement and other related literature review.

3. Results and Discussion

The results of the study are presented and analyzed in detail according to the three specific objectives of the study. With regard to the profile of respondents, it has been noted that the majority of the population respondents have been encouraged, provided and got information from the CHWs in Ruhashya Health Center.

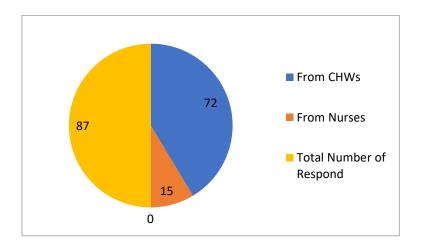
Figure 1: persons who encouraged the users for FP services



As the figure above, 60% of the respondents have been encouraged by the CHWs and 20% are self-motivated.

White and Speizer (2007b) showed also that, both urban and rural areas included education level by CHWs to use family planning were more likely to use than women who were not. The results showed us that the respondent's encouragement on family planning, were significantly more likely to be the product of CHW.

Figure 2: provider/counseling of modern family planning methods to participants



The figure number 2 shows that 72% the respondents received counseling from CHWs on family planning and 15% received it from nurses.

In Nigeria (Waboso, 2014), it is estimated that providing women with access to modern contraceptives through community health workers counseling sessions would reduce maternal deaths by 25%, newborn deaths by 18% and unintended pregnancies by 75%. From the year 2004 to 2006, during which period there was no community health workers 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 health workers mobilization, there were 180 new acceptors of contraceptives at the facility, the same for our results showed that a good number of counseling is done by CHWs which expect the access to the family planning methods.

Figure 3: knowledge on family planning methods among participants

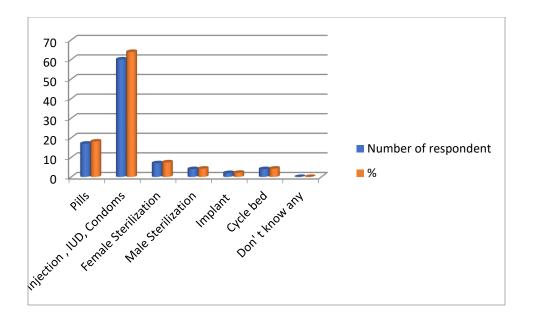


Figure number three shows that the majority of the respondents have been knowledged about pills, injection, Intra Uterine Device (IUD) and condoms which reduced maternal deaths, new born deaths and unwanted pregnancies.

As per Waboso (2014), providing women with access to modern contraceptives such as pills, injection and IUD through community health workers would reduce maternal deaths by 25%, newborn deaths by 18% and unintended pregnancies by 75%. It expected from the above results to have the same without any contradiction.

With community health workers mobilization in Nigeria, the rural women acceptance of the long-term reversible methods of contraception was higher than previously. Prior to the period of community

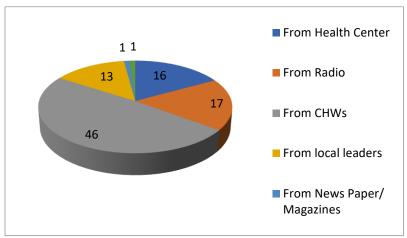
mobilization, 13 out of 30 who were in need of permanent limitation of their family size were relying on inject able contraceptives. On the other hand, with community health workers mobilization, the vast majority of the women 120 out of 122 who were in need of permanent limitation of their family size opted for either the long-acting reversible contraceptive methods or bilateral tubal ligation, the same for our study, a good number of users opted the various contraceptive methods through CHWs.

As per the study done in Uganda by J. Stanback, K Mbonye, and Martha Bekiita, (2007), there were no serious injection site problems in either group. Similarly, there was no significant difference between continuation to second injection (88% among clients of community-based workers, 85%

among clinic-going clients), nor were there significant differences in other measures of safety, acceptability and quality. Community-based distribution of injectable contraceptives is now routine in some countries in Asia and Latin America, but is practically unknown in Africa, where arguably the need for this practice is greatest.

This research reinforces experience from other regions suggesting that well-trained community health workers can safely provide contraceptive injections as per this result.

Figure 4: Source of information on family planning methods use among participants



As figure number four above, 46% of the respondents got the information from CHWs and 17% got the information from Radio.

In Kenya, by far the majority of respondents get their family planning information from friends. Mass media such as radio, books, television, newspapers, etc., while they are source of information, they are not as influential as CHWs friends, which are the results of this studies contradicting to this. The paper concludes this section by saying that since available family planning methods CHWs oriented, chances are that adoption and use of contraceptives will not improve

until there has been a positive cooperation of all stake holders and demonstration that modern health care can ensure survival of children, or until such time that the population has been educated in basic health services.

Table1: appreciation of CHWs by their clients

Number of respondents	%
10	71.43
3	21.43
1	7.14
0	0
	respondents

Source: primary data

The table 1 shows that 71.4% of the CHWs are highly appreciated by the clients and 21.4% are appreciated.

Table 2: Experience of CHWs in the service of FP methods

Experience	n Number	of
years	responden	ts %
3 years	9	64.29
2 Years	3	21.43
1 Years	2	14.29
Below six months	0	0.00

Source: primary data

The table number 2 shows that 64.2% of the CHWs are having three years experience by providing FP services to the community, 21.4% are having two years, 14.2% are having 1 year.

Table 3: Quality services appreciation of CHWs by the clients with feedback on side effect

Level appreciation	of	Number of respondents	0/0
High performing		13	92.9
Low performing		1	7.1

Source: primary data

According to the table number three, 92.9% of CHWs are appreciated by their clients for the quality services. And only 7.1% are lowly performing according their clients.

In Uganda, Researchers successfully followed 777 (82% follow-up): 449 community worker clients and 328 clinic-based clients. Ninety-five percent of community-worker clients were "satisfied" or "highly satisfied" with services, and 85% reported receiving information on side-effects which is the same case from this study.

Table 4: Average number of clients served by CHWs in a month

Clients/ month	Number of respondents	%
[12-15]	9	64.29
[5-12]	3	21.43
[1-5]	2	14.29

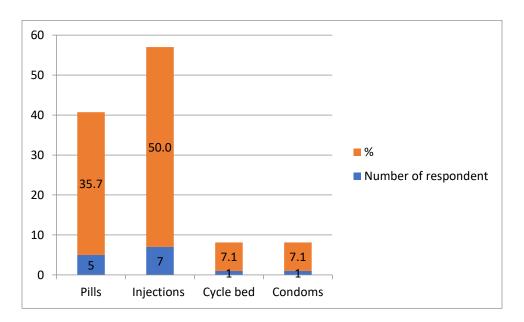
Source: primary data

The table number four shows that 64.29% of the respondents received by CHWs between 12 and 15 clients per month.

When asked whether the volume of clients
coming to the health centers for FP had
Decreased since the commencement of the
CBP program, supervisors universally agreed
that they had seen a decrease in attendance for FP.

On average, each CHW had 23 clients during the seven-month period. However, educated people, do not want CHWs to administer injections because they know that they are not medical professionals, this also varies widely by district; In Gatsibo, CHWs had an average of 42 in Kicukiro the average is 13 and in Rusizi the average is 9 clients and we should not forget (J. Wesson et al. 2011b).

Figure 5: Family planning methods mostly used by the users



Source: primary data

As per the table number five, 50% of the respondents are using injections as their uptake methods, 35.7% are using pills.

As per the literature review the vast majority of the women in need of permanent limitation of their family size opted for either the long-acting reversible contraceptive methods or bilateral tubal ligation which is the case of injection for our study that the majority of the respondents opted.

Many reports and reviews suggest that lower level community health workers have serious training deficiencies. For example, a WHO algorithm for managing childhood illnesses was ineffective because CHWs had serious difficulties in understanding it. In India, it was found that lower level workers had problems understanding a number of different training manuals. (Prasad & Muraleedharan, 2008).

In Uganda, workers in community based HIV/AIDS prevention Program is supposed to visit households to collect data about the number of HIV cases in the village. However, they were never trained to collect the information, and had no forms on which to

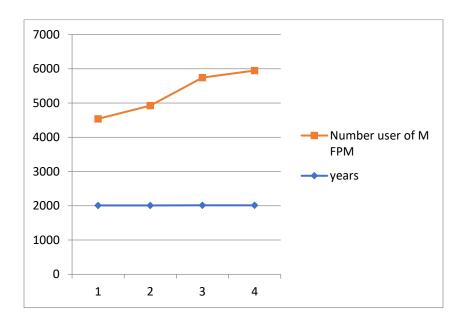
record it. The workers received three days or less of training on all topics and did not feel competent to counsel or provide information on any of them (Parker, 2010). We found

insufficiency material as the challenges which are the contradiction to this.

Assessment of Prevalence of Modern Family Planning Method

Years		2015	2016	2017	2018
Number	user	of			
modern	far	nily			
planning 1	nethod	2528	2911	3729	3934

Figure 6: prevalence of modern family planning methods per health center



Source: Secondary data

The figure number 6 indicates that the prevalence of modern family planning methods increases year by year as per the program of Community Based Provision (CBP), Ruhashya who started from 70 to 80%.

There increase of contraceptive use from 16% to 26%, over a period of 2 years in 13 provinces in Afghanistan. The health workers increased contraceptive use by 24–27% in its three sites over 8 months. Overall, contraceptive users increased from 532 to 1469 among the 3708 women. In Farza, usage increased from 188 to 726 among 2136

women; in Islam Qala, from 168 to 370 among 840 women; and in Tormay, from 176 to 373 among 732 women. The case is also the same for our study as per the figure indicates.

4. Conclusion and Recommendations

The study aimed to assess the effectiveness of CHWs to the scaling up the use of modern family planning methods in Huye District, using a case of Ruhashya health center, and after the analysis done it is well clear that they are providing injections, pills, counseling about other methods in a very effective way.

Traditional rural communities will rapidly accept modern contraceptives, particularly injectables, introduced by CHWs when people are educated about common non-harmful side-effects and correct use. Medical misconceptions were more important than cultural and religious barriers. Men's involvement was vital in supporting their wives' use of birth spacing. Once educated, men demonstrated positive practices about birth spacing for maternal and child health.

Recommendations

Community health workers are often not adequately equipped to fully carry out their tasks. In HUYE CHWs are expected to make home visits to modern family planning clients because these CHWs do not have umbrellas or gumboots few home visits are made during the rainy season. Similarly, a lack of bicycles limits the number of areas they can visit some programs do adequately equip workers (for example the UNFPA, GF) but many others do not. A lack of supplies and other tools needed by workers may harm the program's image in the community and discourage utilization of services in MFP, health authorities were often unable to provide the supplies and other information needed, lack of knowledge, self-confident religion and negative adverse, trainings on modern methods focus should be of high priority.

5. Acknowledgement

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References

(2014). Community Health Worker. new york: American Dental Education Association.

dictionary, o. (2014). landon: Oxford University Press.

(2014). health of child. Encyclopedia of child health.

J, G. (2103). Source of information family planing in Kenya. Nairobi: working paper.

Wesson. J. et all, (2011). Itroducing Community-Based provision of Family Planning services in Rwanda: A Process Evaluation of the First Six Months of Implementation. Kigali: MOH.

- JF Phillips, W Stinson, S Bhatia, M Rahman,
 J Chakraborty. (1982). The
 demographic impact of the Family
 Planning Health Services Project in
 Matlab, Bangladesh. *Stud Fam Plann*,
 131-40.
- John Stanback, Anthony K Mbonye, and Bekiita. Martha (2007).injections Contraceptive by community health workers in nonrandomized Uganda: a community trial. Bulletin of the World Health Organization, 768-773.

- John Stanback, Anthony K Mbonye, Martha Bekiita. (2007). Contraceptive injections by community health workers in Uganda: a nonrandomized community trial. *Bulletin of WHO*, 733-820.
- Justin S White and Ilene S Speizer. (2007).

 Can family planning outreach bridge the urban-rural divide in Zambia?

 BMC Health Services Research, 143.
- McCarraher D, Bailey P. Bolivia. (2000).

 Depo-Provera provision by community-based distribution workers and other CIES staff in El Alto. Family Health International.
- Megan Douthwaitend and patrick Ward. (2007). Increasing contraceptive use in rural Pakistan: an evaluation of the Lady Health Worker Programme.

 HEALTH POLICY AND PLANNING, 117–123.
- Mezgebu Yitayal, Yemane Berhane,
 Alemayehu Worku and Yigzaw
 Kebede. (2014). The communitybased Health Extension Program
 significantly improved contraceptive
 utilization. Journal of
 Multidisciplinary Healthcare, 201208.

- NEWTIMES. (2010). Health workers receive family planning training. Kigali: newtimes.
- Reddick, C. (2011, October 10). *PIH*.

 Retrieved July 25, 2014, from www.pih.org:

 www.pih.org/blog/bringing-family-planning-to-villages-in-rwanda
- Salahuddin Ahmed, Maureen Norton, Emma Williams, Nazma Begum, Amensty Lefeva, Ahmed Al-Kabir and Abdullah Baqui. (2013). Operations research to add postpartum family

- planning to maternal and neonatal health to improve birth spacing in Sylhet District, Bangladesh. *Global Health: Science and Practice*, 262-276.
- Wesson, J. (April, 2011). process evaluation on community based familly planning . kigali.
- WHO. (2013). *Family planning*. Geneva: WHO Nedia Centre.
- WHO. (2014). Fact sheet N°94.
- WHO. (2014). FAMILY PLANNING. WHO.