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FACTORS AFFECTING CONTINUITY AND SUCCESS OF COMMUNITY-BASED REPRODUCTIVE HEALTH SERVICE PROGRAMME IN RURAL COMMUNITY OF NORTHEAST ETHIOPIA

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FACTORS AFFECTING CONTINUITY AND SUCCESS OF COMMUNITY-BASED REPRODUCTIVE HEALTH SERVICE PROGRAMME IN RURAL COMMUNITY OF NORTHEAST ETHIOPIA

A. MEKONNEN, A. SOPHIE, M. DRAMAIX-WILLMET and A. BANTAYEHU

ABSTRACT

Objective: To assess opportunities and threats towards the continuity and success of Community based reproductive health service programme in Northeast Ethiopia.

Design: Community based comparative cross sectional study.

Setting: Two districts of Amhara region, Ethiopia, classified as strong and weak community based reproductive health programme areas.

Subjects: Seven hundred and ninety two women aged 15-49 years residing in the selected districts of Amhara region. Community based reproductive health workers, programme coordinators and field supervisors were used as informants of qualitative data collection.

Main outcome measure: Current use of modern contraceptive methods.

Results: Strong versus weak programme areas: knowledge about modern contraceptive method (MCM), was (90% and 86.8%), [OR (95% CI) = 2.87(1.68,4.91)], ever use of MCM (61.1% and 29.7%), [OR (95% CI) = 3.71(2.72, 5.07)] and current use of MCM (54.8% versus 19.7%), [OR (95% CI) = 4.95(3.53,6.95)]. Method interruption was significantly higher, 37.6% in weak than 10.9% in strongly performing programme area. Causes of defaulting in strong versus weak programme areas were: wanted more pregnancy (4% and 39.5%), fear of contraceptives' side effects (16% and 31.6%) and lack of method of choice (20% and 2.6%). Type of religion, husband approval, awareness of service existence and client satisfaction remained to be the predictors of current use of MCM in multivariate analysis. Qualitative study findings were found coherent with the quantitative results.

Conclusion: Type of religion, husband approval, client satisfaction and awareness of service existence were the predictors of modern contraceptive methods utilisation in the study population.

INTRODUCTION

Among women of reproductive age (15-49 years) in developing countries the burden of reproductive ill-health is far greater than the disease burden from tuberculosis, respiratory infections, motor vehicle injuries, homicide and violence or from war (1-3). Ethiopia being one of the world poorest countries has high and unmet health needs. As it is the case in many other developing countries, the health care in

general and reproductive health in particular have suffered from inadequate staffing and allocation of resources (3).

Ethiopia is the third most populated country in Africa, has one of the highest population growth rate, 2.9%, and total fertility rate of 5.9 children per woman. Other health status indicators, such as maternal mortality ratio 871 deaths per 100,000 live births, infant mortality Rate 97 per 1000 live births; under five child mortality rate 166 per 1000, life expectancy

at birth 50, primary health service coverage 52%, and family planning coverage only 8.1%, are the worst in the world (4,5). In many developing countries, including Ethiopia, community based distribution (CBO) programme has proved to be cost-effective and an alternative approach besides the traditional institution-based service delivery strategy (6-8). Community based distribution programme has been transformed to community based reproductive health programme (CBRHP) in the last few years after governments ratified the International Conference on Population Development (ICPD) programme of action which calls for a comprehensive and client-centered view of reproductive health in addition to family planning (9,10,12,14,15).

Between March and April 2004, with an objective of assessing the opportunities and threats towards the continuity and success of community based reproductive health service programme, the current study was carried out in the two districts found in South Wollo administrative zone of Amhara region, Ethiopia where the community based reproductive health programme is being implemented by an indigenous and non-governmental community based organisation called Amhara Development Association (ADA) since January 2000.

MATERIALS AND METHODS

Study design: The study used both quantitative and qualitative study methods. Community based comparative cross sectional study was conducted comparing strong and weak community based reproductive health service programme areas.

Study area: South Wollo Zone is one of the 11 administrative zones in Amhara region, Ethiopia. It is subdivided into 18 districts and again sub divided into 519 kebeles (smallest administrative units). In the current study, Jamma and Sayint districts were taken as weak and strong performing CBRH programme areas respectively (11). Jamma district is 110 and Sayint 207 kilometres away from the capital of the zone, Dessie town. Both districts have agrarian economy. However, Jamma district is relatively surplus producing area as compared to Sayint that is mainly characterised by poor infrastructure, drought prone, poor land fertility and rugged landscape. Based on the presence of the smallest health unit, the physical health service coverage of Jamma and Sayint districts is 48% and 50% respectively.

Study population: The study population included women in the reproductive age group (15-49 years), residing in the geographic boundaries of Jamma and Sayint districts of Amhara region, Ethiopia.

Selection criteria (Empirical)

Strong CBRI-IP areas: These are districts with a contraceptive prevalence rate (CPR) of 15% or more and % of active CBRH agents above 90%.

Weak CBRHP areas: These are districts with a contraceptive prevalence rate of 4% and % of active CBRH agents <50%.

Sampling procedure and sample size determination:

Multistage sampling techniques have been employed. Among eleven zones in Amhara region, South Wollo zone was selected due to the presence of the CBRH programme. During the data collection period, twelve districts were implementing CBRH programme in the Zone. Based on pre-defined empirical criteria stated above, these twelve districts were classified into two as strong and weakly implementing community based reproductive health service programme areas, out of each group the extreme (either the strongest or the weakest) was selected and included in the study. Out of the rural villages found in each selected district, a total of eight villages (four from each district) were randomly selected and included in the study. Finally, households were systematically identified. The number of households included in the study was determined using proportional allocation method based on the population size of each village. In each household, a woman in the reproductive age group was enrolled in the study and interviewed. If there was more than one eligible woman in a household, one was selected by lottery method. In case there was non-eligible in the selected household the next household was included in the study. Using EPI6 statcalc for two proportions, 792 women in the reproductive age (15-49 years) group were included in the study.

Variables in the study: Independent variables included socio-demographic characteristics such as age, educational level, religion, marital status and past reproductive characteristics: number of pregnancies, number of children and history of unwanted pregnancies. Knowledge, attitude, practice towards modern contraceptive methods and knowledge, perceptions, approaches and views of women with regard to community based reproductive health service were also considered. Current use of modern contraceptive method was the outcome variable in this study.

Data collection and analysis: Quantitative data was collected in a house-to-house interview based on structured questionnaire. The questionnaire was translated into local language, pre-tested and refined before the actual data collection was launched. Data

collectors were secondary school graduates, with previous experience in data collection techniques, and trained for three days. Two staff nurses were recruited and trained to be supervisors and facilitators of qualitative data collection.

Qualitative data were collected through individual in-depth interview with responsible programme coordinators, supervisors and health workers at different level and focus group discussion with women and CBRH agents. Each focus group was composed of eight to ten people. Semi structured open-ended questionnaire guide was used to collect information. Quantitative data were entered with EPI info version 6.04 and analysed using statistical package for social sciences (SPSS) version 11.5. Odds ratio and chi square test were used to assess statistical association, whereas 95% confidence interval and p-value for statistical significance. Where chi square test was not appropriate, Fisher's exact test was used. Logistic regression analysis was also performed to see the relative effect of the predictors on the dependant variable.

RESULTS

Quantitative part: A total of 792 women in reproductive age group (15-49 years) were interviewed, out of which 397 and 395 were in the strong and weak CBRH programme areas respectively. Baseline characteristics of these populations are presented in Table 1 (distribution of socio-demographic characteristics) and Table 2 (past reproductive history of women).

The mean \pm S.D ages in the strong and weak areas were 28.9 ± 7.8 and 27.6 ± 8.4 respectively. Three hundred and forty two (86.4%) and 339 (85.8%) of the women in strong and weak programme areas respectively were currently married. In the strong and weak programme areas respectively, three hundred and eighty nine (98%) and 280 (70.9%) were orthodox Christians while four (1%) and 111 (28.1%) were Muslims. Among respondents, 66.2% of the strongly performing and 63.7% of the weak programme areas respectively cannot read and write. Three hundred and thirty five (84.8%) and 320 (81.6%) in strong and weakly performing areas respectively were housewives.

Table 1

Socio-demographic characteristic of strongly and weakly performing CBRHP areas, South Wollo, Ethiopia, April 2004

Variable	Strongly performing CBRHP areas (n=397)		Weak CBRHP areas (n=395)		X ²	P-value
	No.	(%)	No.	(%)		
Age (years)						
15-19	54	13.6	51	12.9	10.50	0.062
20-24	55	13.9	77	19.5		
25-29	92	23.2	96	24.3		
30-34	81	20.4	56	14.2		
35-39	64	16.1	53	13.4		
≥ 40	51	12.8	62	15.7		
Mean \pm SD	28.9 \pm 7.8		27.6 \pm 8.4			
Marital Status					0.68	0.878
Married	342	86.4	339	85.8		
Divorced	27	6.8	27	6.8		
Widowed	8	2	6	1.5		
Single	19	4.8	23	5.8		
Religion					140.9	0.000*
Orthodox	389	98	280	70.9		
Muslim	4	1	111	28.1		
Others	4	1	4	1		
Education					0.56	0.45
Illiterate	263	66.2	251	63.7		
Literate	134	33.8	143	36.3		
Occupation					5.34	0.254
Farmer	34	8.6	33	8.4		
Housewives	335	84.8	320	81.6		
Local drink sellers	6	1.5	15	3.8		
Students	11	2.8	10	2.6		
Others	9	1.3	14	3.6		

NB: * Fischer exact test

The median numbers of pregnancies and currently alive children a woman had in both programme areas were found to be four and three respectively. Unwanted pregnancy was reported by 14 (4%) and 19(5.4%) of women in the strong and weak programme areas respectively. History of spontaneous abortion was reported 22.4% vs. 19.7% in the strong and weakly performing CBRH programme areas. No women except two, in the weak areas reported history of induced abortion.

Statistical analysis for these baseline characteristics showed that the populations did not differ, except in terms of religion, showing a greater amount of women with Orthodox Christianity in the strong intervention area.

Knowledge, Attitude and Practice (KAP) towards modern contraceptive methods: The knowledge of modern contraceptive methods (MCM) was 95% in the strong, and 86.8% in the weakly performing CBRHP areas with statistically significant difference [OR (95% CI) = 2.87(1.68,4.91)]. Ever use of MCM, 61.1% in the strong and 29.7% in the weak CBRHP areas, was statistically

significant [OR (95% CI)=3.71(2.72, 5.07)]. Though statistically significant difference was not observed, among never users, 50% and 59% of the respondents had future plan to use CBRH service in the strong and weak programme areas respectively [OR (95% CI) = 0.69(0.36, 1.32)]. Current use of MCM was 54.8% of women in strong and 19.7% in the weak CBRHP areas was also statistically significant [OR (95% CI) = 4.95 (3.53, 6.95)]. No difference was observed between current users, 72.5% and 80% that used injectable form and, OCP 26.4 % and 16.9% in the strong and weak CBRH programme areas respectively. One hundred and eighty six (93.9%) and 56(94.9%) of the current users in the strong and weak programme areas respectively, were using the method of their choice. Among ever users, contraceptive supply problems were encountered in 42(18.3%) and 17(16.8 %) of women in strong and weak areas respectively (Table 3). Among current users, husband's approval was found to be 95.2% versus 96.5% in the strong and weak programme areas with no statistically significant difference, [(c2=0.18, P=0.67)].

Table 2

Past reproductive characteristic history of women in the Community based reproductive health programme areas of South W 0110 Zone, April 2004

Variable	Strongly performing CBRHP areas		Weak CBRHP areas		X ²	P-value
	No.	(%)	No.	(%)		
Total number of pregnancies	(n=397)		(n=395)		0.72	0.95
0	39	9.8	40	10.1		
1-3	142	35.9	146	37.0		
4-6	131	33.1	133	33.7		
7-9	73	18.4	64	16.2		
≥ 10	11	2.8	12	3		
Median	4.0		4.0			
Alive number of children a woman had	(n=3551)		(n=3521)		1.04	0.79
0	5	1.4	4	1.1		
1-3	176	49.6	184	52.3		
4-6	136	38.3	123	34.9		
7-10	38	10.7	41	11.6		
Median	3.0		3.0			
History of unwanted pregnancy	(n=354)		(n=354)		0.79	0.37
Yes	14	4	19	5.4		
No	340	96	335	94.6		
History of spontaneous abortion	(n=353)		(n=305)		3.35	0.19
Yes	79	22.4	58	19.7		
No	274	77.6	247	80.3		
History of induced abortion	(n=317)		(n=266)		2.39	0.21 *
Yes	-	-	2	0.8		
No	317	100	264	99.2		

Note: * Fischer exact test, ¹Those women who had at least one pregnancy

Table 3

Comparison of knowledge, attitude and practice of modern contraceptive methods between strong and weak CBRHP areas, South Wollo, April 2004

Variable	Strong CBRHP areas		Weak CBRHP areas		OR	(95% CI)
	No.	(%)	No.	(%)		
Knowledge of MCM	(n=397)		(n=395)			
Yes	377	95	341	86.8	2.87	(1.68,4.91)
No	20	5	52	13.2	1*	
Future plan to use CBRHS	(n=1461)		(n=2391)			
Yes	25	50	92	59	0.69	(0.36, 1.32)
No	25	50	64	41		
Ever use ofMCM	(n=397)		(n=395)			
Ever used	229	61.1	101	29.7	3.71	(2.72,5.07)
Never used	146	38.9	239	70.3	1*	
Current use of MCM	(n=397)		(n=395)			
Users	204	54.8	65	19.7	4.95	(3.53, 6.95)
Non users	168	45.2	265	80.3	1*	
Use of Method of choice	(n=2042)		(n=652)			
Yes	186	93.9	56	94.9	0.83	(0.23,3.05)
No	12	6.1	3	5.1		1*
MCM supply problems	(n=2294)		(n=1014)			
Faced	42	18.3	17	16.8	1.11	(0.59,2.06)
Not faced	187	81.7	84	83.2	1*	
MCM used by current users	(n=2043)		(n=653)			
Injection	148	72.5	52	80.0	0.58	(0.26, 1.25)
Tablet	54	26.4	11	16.9	1*	
Others	1	0.49	1	1.5		

Note: *reference values, ¹Never users ofMCMs, ^{2,3}Current users of MCM, ⁴Ever Users of MCM

Causes of interruption and never use of MCM as reported by women: Eleven percent of women in strongly performing programme area had interrupted the use of MCM as compared to 37.6% in the weak programme area that is statistically significant at [OR (95% CI) = 4.92(2.66, 9.15)]. The major reasons for method interruption in strong versus weak programme areas respectively were: need for more pregnancies, 4 % vs. 39.5 %, fear of untoward effects of contraceptives, 16% vs. 31.6% and absence of method of one's choice 20 % vs. 2.6 %. The three most frequent reasons for never use were: need for more children 58.2% vs. 59.8%, lack of information 11% vs. 11.3 % and absence of sexual partner 14.4 % vs. 5.9% in the strong and weak programme areas respectively (Figure 1). No statistically significant difference was observed for reasons of method interruption and never use between the two populations except that higher proportion of women in strong performing area responded the need for more pregnancies as a reason for method interruption, ($\chi^2 = 12.21, P = 0.00$).

Knowledge, perception and views of women towards CBRH services: Significantly higher proportion, 92.4%

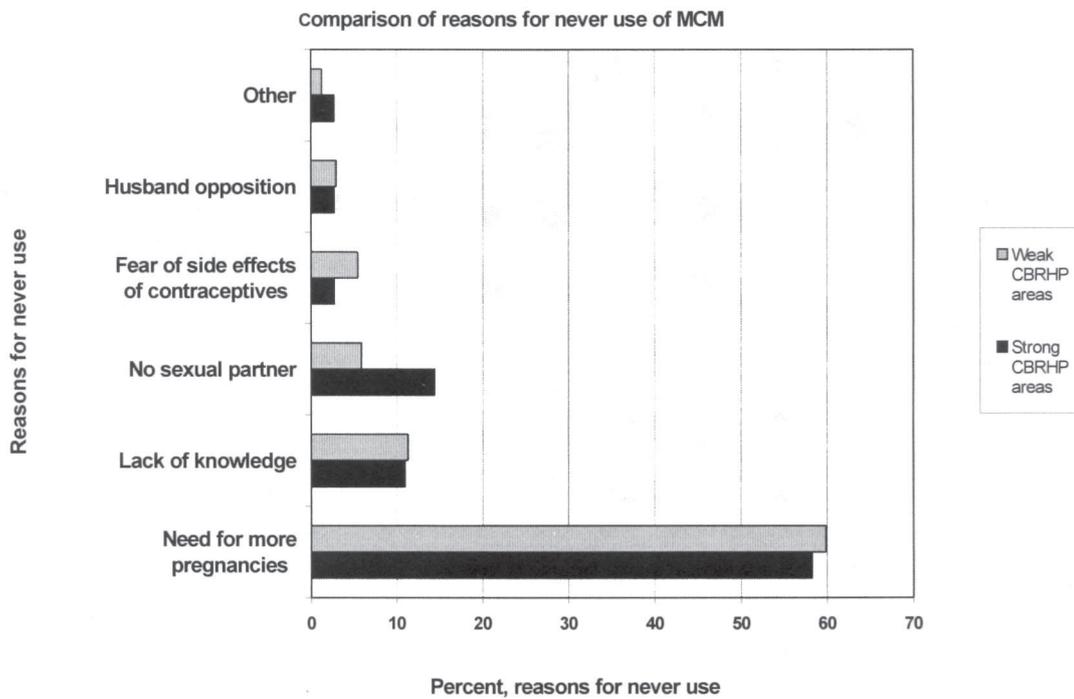
in strong than 67.4% in weak CBRH programme areas, know the existence of CBRH agents in their village [OR (95%CI) =5.88 (3.83, 9.02)] (Table 4). There was a trend towards a greater involvement of women in the recruitment process of CBRH agents. "Ever talked with village CBRH agent" between the strong 81.9% and weak areas, 72.6% respectively, was statistically significant [OR (95%CI) =1.71(1.16, 2.49)]. Among women who had ever-talked, 264 (74.7%) and 180 (69.7%) in strong and weak programme areas respectively received at least one type of RH service. Peer pressure so as to be a client of CBRH service was exerted by 112 (29.8%) of women in strong programme area as compared to 45(12.7%) in the weak programme area. The difference was statistically significant, [OR (95%CI) =2.92(1.99, 4.29)] (Table-4). More than 80% of the women in both programme areas responded that the one-time fee for service (0.50 Birr for a cycle of OCP and 3 Birr for an injection of depo-provera, equivalent to 0.06 and 0.35 USD respectively) was neither expensive nor constitutes a barrier to their family income. The perception of respondents that many other people were using CBRH service in their village was significantly higher, 69.6% in strong,

than 38.3% in weak programme areas, [OR (95%CI) =3.69(2.71,5.01)]. Though more than 85% of women in both programme areas reported high level of service

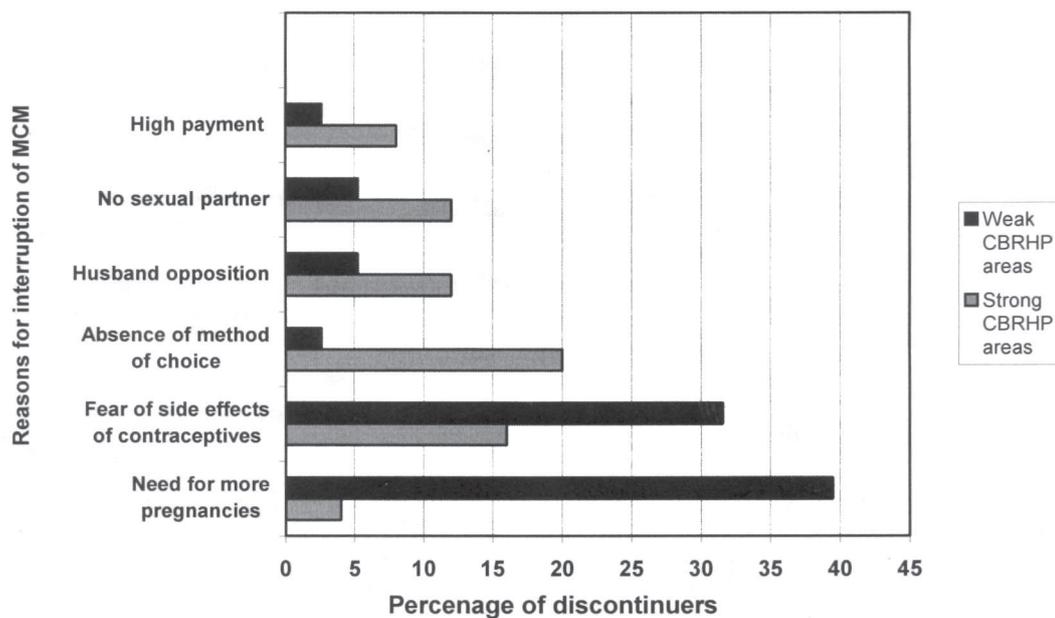
satisfaction, statistically significant higher proportion was observed among women in strong programme areas [OR (95%CI) =3.07(1.64, 5.75)].

Figure 1

Comparison of reasons for interpretation and never use of MCM in the strong and weak programme areas



Comparison of reasons for interruption of MCM between strong and weak programme areas



The odds of discontinuing the service contraceptive method in use, if the current project based CBRH programme came to an end or phased out was three times higher in strongly performing areas, 82.7% compared to, 60.1%, in weak programme area [OR (95%CI) =3.17(1.95, 514)].

Socio-demographic and other pertinent variables in relation to current use of MCM: Socio-demographic variables, such as age, occupation, number of currently alive children, level of education and opinion of women to the affordability of the fee for service showed no statistically significant association with current use of MCM. It was found that, being currently married was associated with the use of one form of modern

contraceptive method as compared to others (single, divorced and widowed) [OR (95%CI) =1.64(1.01, 2.66)].

To be Christian (Orthodox) in religion was significantly associated with current use of modern contraceptive methods as compared to Muslim [OR (95%CI) =3.12(1.82, 533)]. The odds of using MCM were six times higher among women whose husbands approve family planning than those who do not [OR (95%CI) = 5.79 (2.94, 11.41)]. Awareness of women to the existence of CBRH agents in their village (98.1%) and level of satisfaction by the service received from CBRH agents (97%) were significantly associated with current use of MCM [OR (95% CI) = 15.22 (6.11, 37.95), and 3.39 (1.49, 7.66) respectively] (Table 5).

Table 4

Comparison of perceptions, approaches and views of women towards CBRHS in strong and weak CBRH programme areas of South Wollo, Ethiopia, April 2002

Variable	Strong CBRHP areas (n=397)		Weak CBRHP areas (n=395)		OR	(95% CI)
	No.	(%)	No.	(%)		
Awareness of women to the existence of CBRHA in one's village						
Yes	365	92.4	265	67.4	5.88	(3.83,9.02)
No	30	7.6	128	32.6	1*	
Involvement of women in the recruitment of CBRH agents						
	(n=365**)		(n=265**)			
Yes	94	26	62	23.4	1.15	(0.79,1.66)
No	268	74	203	76.6	1*	
Ever talked with the CBRH agents						
Yes	294	81.9	191	72.6	1.71	(1.16,2.49)
No	65	18.1	72	27.4	1*	
Ever received advice and service on RH from the CBRHA						
Yes	271	74.7	177	69.7	1.28	(0.89,1.83)
No	91	25.3	77	30.3	1*	
Ever influence a friend or neighbour to use CBRH service						
Yes	112	29.8	45	12.7	2.92	(1.99,4.29)
No	264	70.2	310	87.3	1*	

Continuation of Table 4

Opinion on the one-time fee for service requested by CBRH agents						
Affordable/fair	234	89	219	84.9	0.69	(0.42,1.16)
Not affordable/expensive	29	11	39	15.1		
Women perception on CBRH service use in their village						
Many people are using	261	69.6	136	38.3	3.69	(2.71,5.01)
Not so many people are using	114	30.4	219	61.7		
Satisfaction with CBRH agents						
Satisfied	312	95.1	203	86.4	3.07	(1.64,5.75)
Not satisfied	16	4.9	32	13.6		
Women intention when the current programme stops/phase out						
Stop the service/method	172	82.7	92	60.1	3.17	(1.95,5.14)
Continue the service/method anyway	36	17.3	61	39.9	1*	

Note: *reference values, ** those who are aware of the existence of CBRH agent in their village.

Table 5

Socio-demographic and other pertaining variables in relation to current use of modern contraceptive methods, South Wollo, Ethiopia, April 2004

Variable	Current use of MCM		OR	(95% CI)
	Yes	No (n=433)		
Age				
≥ 28	154 (57.2)	232 (53.6)	1.61	(0.85,1.58)
< 28	115 (42.8)	201 (46.4)	1*	
Marital Status				
Married		242 (90.3)	368(85)	1.64 (1.01,2.66)
Others (single, widowed, separated)	26 (9.7)	65 (15)	1*	
Occupation				
House wives	233 (86.9)	351 (81.8)	1.48	(0.96,2.28)
Others (farmers, local drink sellers, students)“	35 (13.1)	78 (18.2)	1*	
Educational status				
Literate	92 (34.2)	163 (37.7)	0.84	(0.62,1.18)
Illiterate	177 (65.8)	269 (62.3)	1*	

Continuation of Table 5

Religion						
Christian/Orthodox	246	(93.2)	351	(81.4)	3.12	(1.82,5.33)
Muslim	18	(6.8)	80	(18.6)	1*	
No. of currently alive children						
> 4	99	(38.4)	120	(31.3)	1.37	(0.98,1.90)
≤ 4	159	(61.6)	263	(68.7)	1*	
Husband approval to FP methods						
Approve	232	(95.5)	193	(78.5)	5.79	(2.94,11.41)
Disapprove	11	(4.5)	53	(21.5)	1*	
Awareness of women's to the existence of CBRHA in their village						
Yes	264	(98.1)	333	(77.6)	15.22	(6.11,37.95)
No	5	(1.9)	96	(22.4)	1*	
Women's opinion to the one time fee for service requested by CBRHA						
Affordable/Fair	258	(97)	192	(83.8)	1.62	(0.96,2.75)
Not affordable/Expensive	8	(3)	37	(16.2)	1*	
Women satisfaction by the CBRHS						
Satisfied	258	(97)	238	(90.5)	3.39	(1.97,7.66)
Not satisfied	8	(3)	25	(9.5)	1*	

* Reference values

Table-6

Results of logistic regression analysis for possible explanatory variables of current use of MCM, South Wollo, Ethiopia, April 2004

Variable	Current use of MCM	
	Adjusted OR	(95% CI)
Religion		
Christian/Orthodox	3.73	(1.81,7.68)
Muslim	1*	
Awareness to the existence of CBRHA in their village		
Yes	6.28	(1.20,32.92)
No	1*	
Husband approval to FP methods		
Approve	4.33	(2.03,9.25)
Disapprove	1*	
Women Satisfaction by CBRHS		
Satisfied	3.08	(1.09,8.71)
Not satisfied	1*	

NS: Marital status *reference values

Results of logistic regression analysis: By putting those predictors that had significant association with current use of modern contraceptive methods (MCM) in the univariate analysis and avoiding the redundant ones, logistic regression analysis was performed. As a result, Religion remained significantly associated with current use of MCM in regression analysis; those who were Christian! Orthodox were more likely to use MCM than Muslims [AOR (95% CI)=3.73(1.81, 7.68)]. Current use of MCM found to have significant association with client satisfaction [AOR (95% CI) =3.08(1.09, 8.71)]. Being knowledgeable on the existence of CBRHS were more likely to be MCM user than not [AOR (95% CI) = 6.28 (1.29, 3292)] Husband approval remained as a predictor of Modern contraceptive use in the logistic model [AOR (95% CI) = 4.33 (2.03, 9.25)] (Table 6).

Qualitative part: The qualitative part was aimed at getting better understanding of the situation, surveying potential users, field workers and programme managers.

Focus group discussion with women aged 15-49 years: A total of four focus group discussions sessions, two in each district, consists of thirty-three women, (16 in weak and 17 in strong programme areas) were conducted. All participants were illiterate, currently married and had a range of two to eleven children.

The objective of the focus groups was to explore and document additional and / or new information that was not captured by the quantitative method. Majority of the participants in both study areas knew injection form (depo-provera) and oral contraceptive method (OCP). Half of the respondents mentioned condom as MCM and two women mentioned rhythm method. Most of the women had heard of the existence of the CBRH service in their village from the CBRH workers that conducted a door-to-door visit to inform them about reproductive health issues. All except a woman, were not using and even some of them knew nothing at all, about FP prior to the introduction of the CBRH programme in their villages. All women unanimously agreed that they started using MCM after thorough discussion and approval by their husbands. Participants in both study areas agreed that they were using the method of their first choice. Injectable form was mainly chosen as compared to OCP in both study areas. The large majority of the CBRH service users in both study areas had a great concern and worry to the sustainability of the programme.

Focus group discussion with community based reproductive health workers: Two sessions, one in each study area, consists of a total of eighteen, 13 males and five females, CBRH agents, were conducted.

All discussants were currently married and had a range of two to six children. All respondents in both study areas were willing and happy at the time of recruitment as CBRH worker, now and on wards. However, they considered that the two weeks family planning focused pre-service training they got was not enough to provide them with the necessary knowledge to respond to the challenging questions that came from their clients. As to fee for the service, all of them unanimously agreed that the fee for service they were retaining from users was not better than nothing as compared to the range of services they were expected to render.

Among the further challenges/problems mentioned by CBRH agents in both study areas, lack of uniformity in the payment pattern between government health institutions and the CBRH programme was the most frequent response. This discrepancy, according to them, created a sense of untruthfulness and dishonesty on their work.

CBRH workers were asked whether or not they themselves were using MCM. Out of eight FGO participants in the strongly performing CBRHP areas, six of them were using MCM since the beginning of the programme, one was widowed and the other argued the use of rhythm method. On the other hand in the weak CBRHP areas, out of ten participants, four were using MCM where as six of them were not due to bad health condition, strong belief that they were naturally spacing their birth and one of them claimed to use rhythm method.

Individual in-depth interview with programme co-coordinators and field supervisors: Interviewees pointed out that CBRH service had largely and meaningfully contributed to the existing health care service delivery, especially in the creation of access to basic RH service to the underserved community, acting as a bridge between the conventional health care system and the community and improved contraceptive prevalence rate (CPR) in the area. In the view of programme coordinators, the success and sustainability of the programme depends on the continuous supply of contraceptive commodities, re-evaluation of the ever volunteerism of CBRH agents, reducing the work load of each agent, current CBRHA-client ratio (1:700 households), and participation and commitment from the local leaders. Interviewees also agreed that steps moved as to the sustainability of the programme so far were not satisfactory. Currently, users' fee collected from each client would be transferred to the zonal common pot so that zone manages the fee collected to buy contraceptive commodities. However, there is an intention, in the near future, to handover this responsibility of fee management and provision of FP commodities to the district social committee and district health office.

DISCUSSION

As expected, differences in the Community Based Reproductive Health service utilisation pattern have been observed between the strong and weak programme areas. The use of both quantitative and qualitative study methods, comparative approach and the inclusion of inaccessible and underserved study areas were the strengths of this study. The scientific sampling procedures and the use of appropriate statistical tests to rule out chances, bias and confounding effect helped to improve the validity of the study. However, the design of the study, being cross sectional, also shares its inability to establish an antecedent-consequence relationship of events. Though vital characteristics were compared between the strong and weak programme areas, there could be potential source of bias/ confounders due to the complexity and interlinked nature of some factors.

Many of the findings in our study are similar to earlier observations. Population characteristics differed only in terms of religion, with a predominantly Christian population in the strong as compared to the weak programme area. In the current study, women in the strong programme area which is predominantly Orthodox Christian had shown a better use of reproductive health services. Studies done in relation to community based distribution and family planning in Ethiopia have shown mixed results in that some programmes were successful even in the predominantly Muslim communities (8). In another community based study in Northern Ethiopia, though both Orthodox Christianity and Islam religions play a role in influencing the use of contraception, 53% of women had responded that they would take contraceptives irrespective of the words of religious leaders (7). The fertility and family planning survey of 1996-97 in Pakistan, where more than 97% of the population is Muslim, showed that, among women who were currently married and never users of contraceptives, 10 % offered religion as the main reason for never use (24).

The prevalence of unwanted pregnancy was found much lower in both programme areas than other studies. In addition to the problem of underreporting, it is generally considered that rural people use children as an additional source of labour force to the family, which might partly explain our results.

A statistically significant difference was observed in the knowledge of women towards MCM (at least one method) between the strong and weak programme areas. The result of the knowledge of women in the strong programme area was higher than in similar studies in the Eastern part of Ethiopia, 89.1%, Tigray 89%, Northern Ethiopia 84.6% and a national figure of 82% (5,7).

More than fifty percent of never users in both programme areas had future intention to use CBRH service. This positive attitude could be viewed as one of the potential grounds to the initiation of similar programmes in the future. Unlike similar studies in Ethiopia, and as compared to the national figure, where OCP is the predominant family planning method used (13,17-19), current users in this study were using injection form of contraception followed by OCP. Focus group discussions with current MCM users and CBRH agents in both study areas had also confirmed this finding. Consideration of continuous supply of injectable form of contraception, to comply with the method of choice, could improve the perceived quality of CBRH programme (17,19). The need for more children and fear of side effects of contraceptives were the most frequent reasons of method interruption among women in the weak programme area. In the strong programme area, husband opposition was reported as well as absence of choice of method. This could show that there was a lack in designing of education and counselling strategy in the weak programme area on the one hand and unmet needs in the strong programme area on the other hand.

Current MCM users in both programme areas, with no statistical difference, reported that their husbands were aware and approved the method that they were using. During focus group discussion sessions, women also unanimously agreed that husband approval was an important step to use MCM. Controlling other socio-demographic variables, husband approval had also remained to be a significant predictor of current use of MCM in the logistic regression model. Experiences from Eastern Turkey, Bangladesh, Ghana and Indonesia also showed, among women who desire to have no more children, the major cause for non use of methods was attributed to husband's disapproval (7,16,20-23).

The difference in the awareness of women to the existence of CBRH agents in their village between the two programme areas was statistically significant. Taking current use of MCM as an outcome variable, awareness of the existence of CBRH workers remained significant in the multivariate analysis. This knowledge of women could serve as an entry point in the initiation of interpersonal communication with CBRH workers.

Though peer pressure has been demonstrated in adolescent health literatures to be an important factor (27), not much has as yet been done in Ethiopia on this topic which maybe an important point, as the current study demonstrated that a significantly higher proportion of women in the strong programme area had ever influenced their friends or neighbours to use CBRH services. This peer pressure effect could serve as an entry point to approach non-users in the future.

Despite the concern of CBRH workers on the scantiness of the fee retained from a client, women in both programme areas had the opinion that the one time fee for service set for the service was fair and affordable. Experiences from Indonesia had shown that a trend of women seeking fee based family planning programmes was at its increase in the mid 1990's (25,26). Non-uniformity in the payment pattern between CBRH services and government health institutions was an issue of discussion during focus group discussion sessions. CBRH workers had also a concern that this discrepancy created them a sense of dishonesty and unreliability.

Unlike that of the fee-for service scheme of CBRH programme, the nearby public health facilities in both study areas run routine Reproductive health service without charge. Prospects for the women after the ongoing programme stops or phases out were found alarming. Only one fifth and forty percent of the current users in the strong and weak programme areas respectively responded that they would continue the methods they were using in any possible way. Unless it is intervened at its outset, this tendency could be a potential threat to the programme success and continuity. Though programme coordinators were keen and moving a step forward to get rid of the threats of the programme, meaningful effort was not exerted towards system establishment at the grass root level especially in the coordination and initiation of the fee management by the local people.

The following three areas were identified as topics that need further exploration: the difference in attitude and tradition towards the practice of contraception as a function of religious identity, the discrepancy between the opinion of client and service providers on the affordability of the one time fee-for service and policy consideration of fee for RH service in the government health institutions to sustain CBRH programme.

CONCLUSION

Though the programme was designed in the same manner, and, CBRH agents were willing to do their job well in both programme areas, it was demonstrated that for some reasons, that could be external factors (opportunities and threats), they were unable to put forward their message in the weak areas. Strategic approach to certain community groups such as husbands of non-users and religious opposition groups could make a difference towards the success of the CBRH programme. The motivation of the CBRH agents, the currently fair and demand based supply of contraceptive commodities, the intersectoral collaboration between actors and the positive attitude of clients towards the CBRH agents were seen as opportunities in the strong programme areas. On the contrary, the poorly designed reproductive health

education strategy, the lack of commitment and absence of shared vision among stakeholders, as it was demonstrated in the weak programme areas, were looked as potential threat to the programme. The great concern and worry of clients on their prospect when the current donor motivated and project based programme halts needs an urgent attention.

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