Original article

Community-based distribution of family planning as perceived by people in the reproductive age group, North and South Gondar zones, Ethiopia

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Abstract: From September 24 through October 4,1997, a cross-sectional survey was conducted to assess the status of Community-based distribution (CBD) of family planning as perceived by reproductive age groups aged 15-49 years and the CBD workers. The study covered 14 German Agency for Technical Co-operation (GTZ) assisted project sites of North and South Gondar Zones selected randomly from four districts. Using systematic random sampling method, 393 community members in their reproductive ages were identified and interviewed. Including males, 345(87.8%) were nonusers. Among the study population, 52.7% of the urban and 46.8% of the rural nonusers of modern family planning were not aware of the presence of CBD workers in their localities. The CBD workers selected by members of the community were 63.9% in urban and 50.4% in rural areas. Significantly higher numbers of males were aware of the selection and the presence of CBD workers ($P<0.05$ and $P<0.005$, respectively). The majority agreed that the CBD workers should be paid for the services they render (82% urban and 92.2% rural). Awareness for the service fee was only 34.4% in urban and 34.8% in rural areas. More females believed that religious leaders were against the use of modern contraceptive methods than males ($P<0.05$). Among 86 CBD workers interviewed, high drop-out of clients and less supervision by clinic health assistants was reported in the rural than urban areas ($P<0.001$ and $P<0.005$, respectively). Active supervision, refresher course for CBD workers, dissemination of information about the CBD workers to the communities is recommended. [*Ethiop. J. Health Dev.* 2000;14(1):31-42]

Introduction

Uncontrolled population growth is a major challenge to development plans of many developing countries. Rapid population growth, coupled with the very decreased yield of land, has intimidated especially the economically poor countries(1).

Increased contraceptive use has been found to be an important intervention in the decline of fertility (2). Decline in fertility requires not only increased prevalence of contraceptive use but also improved quality of services by enhancing the choice of available contraceptive methods (3).

Ethiopia is the second most populated country in sub-Saharan Africa with nearly 55 million-population and high fertility rate. Based on the population policy of Ethiopia, the goal is to raise the prevalence of contraceptive use from 4% to 44% and reduce the total fertility of 7.5 children per woman to approximately 4.0 by the year 2015(4).

It was obvious that the existing poor health infrastructure had limited access to family planning services to the few urban centers and to the institution – based practices. The efforts to improve family planning in and around these centers had little impact on the promotion of family planning services countrywide. The majority of mothers are farmers who live in the underprivileged rural areas with little or no access to health services and education. In addition, it is known that family planning services are affected by multiple behavioral and environmental factors(5-8). Community-Based Distribution (CBD) is one of the

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strategies used to access family planning at the grass root level. It improves the access of family planning services to the hard-to-reach rural communities. In Ethiopia, successful results have been reported from Jimma area(9).

Based on a bilateral agreement between the German and Ethiopian Governments, the German Agency for Technical Co-operation (GTZ) started to support CBD for family planning information and methods in the Amhara National Regional State since June 1995(10). As described in the bilateral agreement, the aim of the project was to jointly promote services for improving family health and family planning. The program was initiated in North and South Gondar Administrative Zones covering all the woredas except Gondar town, Gondar Zuria, and Dembia Woredas of the North Gondar Zone. Based on the 1997 project progress report, it was concluded that "be it weak, family planning service providing system is in place". A total of 5,152 CBD workers were already trained. In some woredas the contraceptive prevalence rate (CPR) has increased considerably (e.g, from 1.5% to 18.2% in Fogera). However, the progress was poor in some of the districts. Debark and Adi Arkay of North Gondar Zone and Lay Gayint and Dera Woredas of South Gondar Zone were identified among the districts with such problems.

From the several meetings conducted by the project, the following problems were identified:

1. The selection of CBD workers was not made by the community;
2. People were not aware of the CBD family planning services in their areas;
3. People have different views about the fee for service;
4. The supervision is poor because the CBD supervisors (i.e., health assistants) wanted to be paid;
5. People in the reproductive age group accept the objections made by religious leaders (mainly priests of the Orthodox Church).

Based on the background information stated above, the objectives of this study were to assess:

1. how the CBD workers were selected,
2. Peoples' perception (awareness) of CBD for family planning and the service fee,
3. the role of religion on the decision to use family planning, and
4. the functionally of CBD workers and the problems they have faced.

The findings of the study will provide information to improve CBD activities in areas where the project has already started and other areas where the program is planned to be initiated (West Gojam Zone, Tigray, and Oromya Regions).

Methods

This community-based cross- sectional survey was carried out between September 24 and October 4,1997 in four woredas (districts) of the two Gondar Zones (Debark and Adi Arkay Woredas of the North Gondar Zone and Lay Gayint and Dera Woredas of the South Gondar Zone). Out of 13 project woredas of the North Gondar Zone and nine Woredas of South Gondar Zone, four Woredas were selected (two from each Zone). The selection of the woredas was based on convenience. Project needs and information required for program improvement was emphasized in the selection process.

Sampling method and procedure

A two-staged sampling technique was used to select clusters (kebeles) and identify households for the study. Twelve clusters were selected randomly. Out of these, seven were from rural and five from urban areas. Two additional urban clusters were selected to interview the CBD workers only. The urban clusters were included for two reasons. Firstly, in order to interview as many CBD workers as possible. This was because, in the majority of cases, there was only one or two CBD workers in each farmer's association. Secondly, it was already known that, in areas like Adi Arkay and Zarima, most of the CBD workers were not reporting, not even those from the urban areas.

The source populations were women and

men in the reproductive age group (15-49 years) residing in the CBD family planning project areas of the four districts.

Households were identified using the systematic random sampling method by going to every 5th house in each cluster. In each household, people in the reproductive age group were enrolled and interviewed. For those who were nonusers of contraceptives and married, both husband and wife were interviewed separately. When both could not be available at the time of the survey, either of the two was interviewed. For users of family planning pills, only the females were interviewed using a detailed questionnaire prepared for the purpose.

All CBD workers in each cluster were enrolled in the study and interviewed by obtaining their lists from their respective Woreda Health Offices which identified the CBD workers. Tracing of the CBD workers in the respective Kebele's or Farmers' Associations was possible with the help of kebele leaders. Sample size was calculated based on an estimated 50% prevalence of awareness of the presence of CBD workers in the respective areas with precision of 95% and 2.5% margin of error.

Data collection instruments: Two types of questionnaires were used, one questionnaire was administered to reproductive age-group members and the other to the CBD workers. The questionnaires were translated form the English into the Amharic language. After pre-testing and standardization, corrections were made. The preparation of the questionnaires was facilitated through key informant interviews and report reviews.

Variables included in the questionnaire: Socio-demographic characteristics of the study population; awareness and participation in the selection of CBD workers; awareness and feelings towards the service fee and CBD family planning; perception about religious leaders concerning modern contraceptive methods; characteristics of CBD workers; presence of defaulters; feelings of CBD workers about their training and the selection.

Data collectors: Trained interviewers who completed 12th grade collected the data. All the interviewers had previous exposures in data collection techniques.

Ethical issues: Permission was obtained from local authorities to conduct the study. In all the study areas, representatives for the Woreda Health Offices participated. Participants were informed about the purpose of the study and their agreement was obtained. The result of the study was communicated to the Gondar-based GTZ family planning project.

Data analysis and statistical tests: Data were analyzed using EPI-INFO version 6 statistical package. Odds ratio and 95% Confidence Interval and Chi-square Test were used to detect statistical associations and differences by sex, residence, zone, and supervision status. Fisher Exact Test was also used where it was applicable.

Operational Definitions

Regular supervision: CBD workers report to the health assistant CBD supervisor monthly.

Functionality of CBD workers: A CBD worker is functional if the CBD worker reported to the health assistant CBD supervisor and collected replenishments.

Perception: This included awareness and attitude towards CBD for family planning services.

Users: Those currently using contraceptive

Non Uuser: not curently using contraceptive

Defaulter: a client who has discontinued to collect contraceptives from the CBD worker.

Urban area: This includes only those towns without a health center and organized by an urban dwellers' association except Adi Arkay town which applies only to community respondents (ie,does not include CBD workers).

Rural area: this includes only those officially organized as peasant associations by-the government .

Results

Among 393 persons (15-49 years) interviewed, 259 (65.9%) were females and 134(34.1%) were males; 69.5% of all the

Table 1: **Socio-demographic characteristics of respondents (aged 15-49 years), by residence, North and South Gondar Zones, September 1997**

Characteristics	Urban No. (%)	Rural No. (%)	Total
Sex			
Male	43(26.6)	91(39.4)	134(34.1)
Female	119(73.5)	140(60.6)	259(65.9)
Age (years)			
15-24	52(32.1)	65(28.1)	117(29.8)
25-34	63(38.9)	93(40.3)	156(39.7)
35-49	47(29.0)	73(31.6)	120(30.5)
Marital Status			
Married	123(75.9)	200(8.6)	323(82.2)
Unmarried	16(9.9)	9(3.9)	25(6.4)
Divorced	16(9.9)	19(8.2)	35(8.9)
Widowed	7(4.3)	3(1.3)	10(2.5)
Religion			
Christian	141(7.0)	231(100.0)*	372(94.7)
Moslem	21(13.0)	0(0.0)	21(5.3)
Occupation			
Farmer	90(55.6)	213(92.2)	303(77.1)
Housewife	44(27.2)	4(1.7)	48(12.2)
Unemployed	12(7.4)	4(1.7)	16(4.1)
Others	16(9.9)	10(4.3)	26(6.6)
Education			
Illiterate	106(65.4)	175(75.8)	281(71.5)
Read and write	20(12.3)	32(13.9)	52(13.2)
Literate	36(22.2)	24(10.3)	60(16.3)

Others: student (12), daily laborer (12) and government employee (2).
* = All except one Protestantwere Orthodox Christians.

respondents were aged 15-34 years and 82.2% Of them were married. Two hundred thirty one (58.8%) were from rural and 162(41.2%) from urban kebeles; 303 (77.1%) were farmers by occupation and 281(71.5%) of them could not read and write (Table 1). The mean age of participants was 29 ± SD 8 years and their median income was 100 Birr per month.

Three hundred forty five(87.8%) of the participants were nonusers of any of the modern contraceptive methods. Of these, 127(36.8%) were males while 218 (63.2%) were females. Seven (5.2%) of the males and 41(15.8%) of the females were ever-users of family planning methods (Table 2). More females were ever-users of family planning methods than males (OR=3.41,95% CI: 1.42-8.60). The mean duration of contraceptive use was 8.3± 6.5 SD months. Two hundred ninthy two (84.6%) of the non-users have either heard about or were aware of modern contraceptive methods and there was no difference between males and females. The mean number of contraceptives known per individual of reproductive age was 1.5. At the time of the survey, 206 (59.7%) of the nonusers wanted to use family planning methods and this desire was similar in males and females (OR= 1.36, 95% CI: 0.85-2.19). Ninty (15%) of the males and 17(7.8%) of the females wanted the decision to use contraceptives to be made by males. Decision was found to be associated with gender (OR=0.14,95%CI: 04-0.48).

As shown in Table 3, 18(11.1%) of the urban and 8(3.5%) of the rural participants were current users of family planning methods. The use of family planning methods was lower in rural than urban respondents (OR= 0.27,95%CI: 0.10-0.67). On the other

Table 2: **Comparison of awareness, attitude, and use of family planning methods, by sex, North and South Gondar Zones, September 1997.**

Factor	Male No. (%)	Female No. (%)	OR	95% CI
Practice (N=393)				
Non-users	127(94.8)	218(84.2)	1.00	
Ever-users	7(5.2)	41(15.8)	3.41	(1.42,8.60)
Prevention of pregnancy (N=345)				
Aware	113(89.0)	179(82.1)	1.00	
Don't Know	14(11.0)	39(17.9)	1.76	(0.88,3.57)
Desire for contraceptive methods (N=345)				
Yes	84(66.1)	122(65.0)	1.00	
No	43(33.9)	96(44.0)	1.36	(0.85,2.19)
Who should decide (N=345)				
Female only	5(13.2)	33(15.1)	1.00	
Both partners	88(41.1)	126(57.8)	0.22	(0.07,0.61)
God	15(11.8)	42(19.3)	0.42	(0.12,1.43)
Male only	19(15.0)	17(7.8)	0.14	(0.4,0.48)
Discussion with spouse within 12 month (N=345)				
Yes	25(19.7)	33(15.1)		
No	102(80.3)	185(84.9)	1.37	(0.74,2.53)

Table 3: **Awareness, attitud,e and use of family planning, by residence, North and South Gondar zones, 1997**

Response	Urban No. (%)	Rural No. (%)	OR	95% CI
Practice (N=393)				
Non-users	129(79.6)	216(93.5)	1.00	
Current users	18(11.1)	8(3.5)	0.27	(0.10,0.67)
Defaulters	15(9.3)	7(3.0)	0.28	(0.09,0.75)
Prevention of pregnancy (N=345)				
Aware	104(80.6)	188(87.0)	1.00	
Don't Know	25(19.4)	28(13.0)	0.62	(0.33,1.16)
Desire for contraceptive methods (N+345)				
Yes	83(64.3)	123(56.9)	1.00	
No	46(35.6)	93(43.1)	1.36	(0.85,2.19)
Who should decide (N=345)				
Both partners	80(62.0)	134(62.0)	1.00	
God	8(6.2)	49(22.7)	3.66	(1.57,8.83)
Female only	19(14.7)	19(8.8)	0.60	(0.28,1.26)
Male only	22(17.1)	14(6.5)	0.38	(0.17,0.83)
Discussion with spouse within 12 month (N=345)				
Yes	21(16.3)	37(17.1)	1.00	
No	108(83.7)	179(82.9)	0.94	(0.50,1.76)

hand, defaulting was lower among rural than urban respondents, 7(3.0%) and 15 (9.3%) with (OR=0.28,95% CI:0.09-0.75) respectively. Awareness about the prevention of unwanted pregnancy was 80.6% among urban and 86.2% among rural respondents, but this difference was not statistically significant (OR=12.8, 95%CI: 0.33-1.16). Similarly, desire for family planning methods did not differ in urban and rural respondents (64.3% and 56.9%, respectively). Eighty (62.0%) of the urban and 134 (62.0%) of the rural respondents wanted the decision to use contraceptives to be made by both partners. However, less rural (14 or 6.5%) than urban (22 or 17.1%) respondents wanted the decision to be made by males (OR=0.38,95% CI: 0.17-0.83). On the contrary, 8(6.2%) of the

Table 4: **Comparison of awareness and attitude of nonusers about CBD family planning, by zone, North and South Gondar Zones, 1997**

Response	N. Gondar No. (%)	S. Gondar No (%)	OR	95% CI
Awareness about CBD				
Presence in locality (N = 345)				
Yes	74(44.3)	102(57.3)	1.00	
No	93(55.7)	76(42.7)	0.59	(0.38,0.93)
Selection of CBD (N + 176)				
Community	51(68.9)	46(45.1)	1.00	
Kebele leaders	5(6.8)	18(17.6)	3.99	(1.28,14.71)
Don't know	18(24.3)	38(37.3)	2.34	(1.12,9.94)
Information about selection (N = 176)				
Yes	38(51.4)	48(47.1)	1.00	
No	36(48.6)	54(52.9)	1.19	(0.62,2.26)
CBD acceptability (N = 176)				
Accepted	55(74.3)	65(63.7)	1.00	
Not accepted	0(0.0)	6(5.9)	*	
Don't know	19(25.7)	31(30.4)	1.38	(0.67,2.87)
Awareness about service fee (N = 176)				
Yes	27(36.5)	34(33.3)	1.00	
No	47(63.5)	68(66.7)	1.15	(0.58,2.26)

* = fisher exact: 2 = tailed P-value = 0.03

Table 5: **Comparison of awareness and attitude of nonusers about CBD family planning, by residences, North and South Gondar Zones, 1997.**

Response	Urban No. (%)	Rural No (%)	OR	95% CI
Awareness about CBD				
Presence in locality (N = 345)				
Yes	61(47.3)	115(53.2)	1.00	
No	68(52.7)	101(46.8)	0.79	(0.50,1.25)
Selection of CBD (N + 176)				
Community	39(63.9)	58(50.4)	1.00	
Kebele leaders	5(8.2)	18(15.7)	2.42	(0.78,8.89)
Don't know	17(27.9)	39(33.9)	1.41	(0.73,3.33)
Information about selection (N = 176)				
Yes	33(54.1)	53(46.1)	1.00	
No	28(45.9)	62(53.9)	1.38	(0.71,2.70)
CBD acceptability (N = 176)				
Accepted	46(75.4)	74(64.3)	1.00	
Not accepted	2(3.3)	4(3.5)	*	
Don't know	13(21.3)	37(32.2)	1.77	(0.81,3.93)
Awareness about service fee (N = 176)				
Yes	21(34.4)	40(34.8)	1.00	
No	11(18.0)	9(7.8)	0.39	(0.13,1.10)

* = fisher exact: 2 = tailed P-value = 1.0

urban and 49(22.7%) of the rural participants left the decision to God's will. The difference was statistically significant (OR=3.66,95% CI; 1.57-8.83). Twenty one (61.3%) of the urban and 37(17.1%) of the rural participants have discussed the issue of family planning with their spouse within 12 months. No statistically significant difference was detected.

Awareness about the presence of CBD workers in the locality was 74(44.3%) and 102(57.3%) in North Gondar and South Gondar, respectively (Table 4). Those from

Table 6: **Comparison of awareness of nonusers about CBD family planning and the role of religion, by sex, North and South Gondar Zones, 1997**

Awareness and attitude	Response Yes	No	X^2	P-value
CBD present in area (N = 345)				
Male	80	47		
Female	96	122	10.79	P<0.005
CBD selection by community (N = 176)				
Male	52	28		
Female	45	51	5.09	P<0.05
Service Fee (N = 176)				
Male	27	53		
Female	34	62	0.01	P>0.05
Know where to find contraceptives (N = 345)				
Male	104	23		
Female	146	72	8.22	P<0.005
Religious leaders oppose (N = 203)**				
Male	18*	75		
Female	41*	69	7.00	P<0.005
Actually discussed with leader (N = 345)				
Male	24	103		
Female	31	187	0.98	P>0.05
Accept decision of leader (N = 345)				
Male	57	70		
Female	126	92	4.87	P<0.05

Note: * = 8 of them were Muslim females while there was only 1 Muslim male
** = included those who said religious leaders oppose, support or are neutral

38(51.4%) in North Gondar and 48(47.1%) in South Gondar. There was no statistically significant association between the two zones and information about selection (OR= 1.9,95 CI: 0.62-2.26).

Eighteen (24.3%) and 38(37.3%) of the participants from North and South Gondar, respectively did know how the CBD workers were selected in their localities. Those who did not know were higher in South Gondar than North Gondar (OR=2.34,95% CI: 1.12-9.94), i.e., 5(6.8%) and 18(17.6%) of the CBD workers were said to be selected by Kebele leaders in North and South Gondar Zones, respectively. More CBD workers were said to be selected by kebele leaders in South than in North Gondar Zone (OR=3.99,95% CI: 1.28-14.71). Awareness about the service fee paid to the CBD workers for their services was similar in both North and South Gondar Zones, ie, 27(36.5%) and 34 (33.3%) respectively. Six of the participants reported that the selected CBD workers were not accepted by the community and all of these respondents were from rural areas (Fisher exact: 2- tailed P-value=0.03).

Awareness about CBD worker selection in the locality was present among 61(47.3%) of the urban and 115(53.2%) of the rural respondents. There was no association between residence and awareness about CBD worker selection (OR=0.79,95%CI:0.50-1.25). Similarly, information about selection and awareness on how they were selected were not different in urban and rural areas (OR=1.38, 95% CI:0.39-2.96 and OR=2.42, 95% CI:0.78-8.89). Awareness about the service fee was present among 34.4% of the urban and 34.8% of the rural respondents. Eithty two percent of the urban and 92.2% of the rural respondents said that the presence of the fee for the services provided by the CBD workers was appropriate, but this difference was not statistically significant (OR=0.39, 95% CI:0.13-1.10) (Table 5).

When analysed by sex (Table 6), significantly more males were aware of the presence of CBD workers in their areas than females (x^2 =10.79, P<0.005). Similarly, more males than females said that community

Table 7: **Response of the CBD workers about CBD family planning, by residence, North and South Gondar Zones, 1997**

Response	Urban	Rural	X^2	P-value
Selection of CBD workers				
By community	49(90.7)	21(65.6)		
By kebele leaders	5(9.3)	11(34.4)	4.79	P<0.01
Use of family planning				
Yes	24(44.4)	18(56.3)		
No	30(55.6)	14(43.7)	0.70	P>0.05
Previous use of FP				
Yes	18(33.3)	7(21.9)		
No	36(66.7)	25(78.1)	0.78	P>0.05
Adequacy of training				
Adequate	34(63.0)	20(62.5)		
Inadequate	20(37.0)	12(37.5)	0.04	P>0.05
Supervision				
Yes, regularly	44(81.5)	15(46.9)		
No*	10(18.5)	17(53.1)	9.62	P<0.005
Problems faced during practice				
Yes	24(44.4)	17(53.1)		
No	30(55.6)	15(46.9)	0.31	P>0.05
Presence of defaulters				
Yes	5(9.3)	14(43.8)		
No	49(90.7)	18(56.2)	11.96	P<0.001

* = Includes 7 from urban and 14 from rural irregular supervisions

members selected the CBD workers ($X^2=5.09, P<0.05$).

Two hundred fifty of the 345 (72.5%) of the nonusers responded that they knew where to find contraceptives and of these, 214 (85.6%) identified health institutions, 1(0.4%) private pharmacy, and only 35(14.0%) identified CBD workers as suppliers of contraceptives. A higher proportion of males knew where to find contraceptives than females ($x^2=8.22$, $P<0.005$). Significantly higher proportions of females reported that religious leaders oppose the use of modern contraceptive methods than males ($x^2=7.00$, $P<0.005$). It was also revealed that a higher proportion of females than males would have accepted the decision of a religious leader about modern contraception ($x^2=4.87$, $P<0.05$).

Out of 86 CBD workers interviewed, 40(46.5%) and 46(53.5%) were from North and South Gondar zones, respectively. Fifty four (62.8%) were from urban and 32(37.2%) from rural areas. The mean age of the CBD workers was 27.4 $\pm$ SD 7.6 years with a range of 17-56 years. The majority of CBD workers, i.e., 76 (88.4%), were females. Seventy one (82.6%) had attended regular schools at different levels, 54 (62.8%) had an educational level above 6th grade, 17(19.8%) were between 1st and 6th grade, 4 (4.7%) could only read and write and 11(12.8%) could neither read nor write. The mean grade of those who attended schools was 8.4 $\pm$ SD 3.2. Twenty four (27.9%), 39(45.3%), 21(24.4%), and 2(2.3%) were single, married, divorced and widowed, respectively. Twenty six (30.2%) were farmers and 22(25.6%) unemployed. The rest were students (8), tella-sellers (8), housewives (7), prostitute (7) and others (8).

As shown in Table 7, 49(90.7%) of the CBD workers from urban and 21 (65.6%) from rural kebeles said that the community selected the CBD worker. The difference between urban and rural respondents was statistically significant ($x^2=6.70$, $P<0.01$). Twenty four (44.4%) and 18(56.3%) of the CBD workers in urban and rural areas,

respectively, were current users of family planning methods; 18(33.3%) and 7(21.9%) were previous users of family planning methods in urban and rural areas, respectively. The mean duration of family planning method use was in (12.4 ± 12 months). The complaint about the inadequacy of the training was similar among urban and rural CBD workers, ie, 20(37.0%) and 12(37.5%), respectively. Supervision by clinic health assistant was regular in 44(81.5%) of the urban CBD workers as compared to 15(46.9%) of the rural ones and the difference was statistically significant ($X^2=9.62$, $P<0.005$). More CBD workers (58/71) who have attended school had gone to the nearby clinic to be supervised than those (1/15) who did not attend any formal school (Fisher exact: 2-tailed P-value<0.0001).

Both urban (24 or 44.4%) and rural (17 or 53.2%) CBD workers have faced some kind of problems during their practice, but the difference was not statistically significant ($X^2=0.31$, $P>0.05$). Opposition to the service fee (22 or 53.7%), condemnation by husbands and religious leaders (14 or 34.1%) and fear of side effects by potential clients (5 or 12.2%) were the problems mentioned. Twenty one (31.3%) believed that they still needed additional knowledge and skill to give health education to help existing and potential clients and to appropriately respond to questions raised by clients or those who want to become family planning users. The total number of clients reported by CBD workers was 1324 with a mean number of 15.3 clients (11.7±SD) per CBD worker. Of the total, 561 (42.4%) clients have defaulted. Five (9.3%) of the CBD workers from urban and 14(43.8%) from rural areas reported the presence of defaulters among their clients. A significantly higher number of CBD workers from rural areas reported the presence of defaulters than those from urban areas ($X^2=11.96$, $P<0.001$).

Discussion

This study revealed that 15.8% of the females and 5.2% of the males ever used one of the modern family planning methods. The current use of modern family planning methods was 11.1% in urban and 3.5% in rural areas. Although the use of modern contraceptive methods has shown discrepancy in urban areas, the utilization rate has increased in the rural areas as compared to the previous report of 2% (11). Probably one of the reasons for the low contraceptive prevalence rate in urban areas might be that the major district towns with health centers were not included in this study since the emphasis was on sites of community-based distribution of family planning.

Awareness towards the prevention of unwanted pregnancy was high in both males and females. Level of awareness was not different in urban and rural areas studied. In fact, unlike the report of the previous study(11), although not significant, more people in the rural areas were aware of the family planning services. This might be explained by the effect of the community-based distribution of family planning where there was only provision of family planning services.

The desire for the use of family planning methods was not affected much by residence (64.3% urban and 56.9% rural). These findings were comparable to the reports of the previous study in the area (11). Similarly, the desire for family panning methods was comparable in both males (66.1%) and females (56.0%), though it was slightly higher in males. As indicated in other studies, the potential users for family-planning methods are still high (12). This study has demonstrated that the decision to utilize contraceptive methods was influenced by male partners, especially in urban areas. In the same way more people from the rural area wanted the decision to be made by God's will. This shows that the decision to use contraception could be influenced by multiple factors, including the spouse. Discussion with the spouse within 12 months was low in both males (19.7%) and females (15.1%) and in urban (16.3%) as well as rural (17.1%) areas (Tables 2 & 3). As depicted by other studies, improving family or couple communication

may be an area that needs further exploration (13-15).

Awareness towards the presence of CBD workers in the locality was higher in South Gondar than was in North Gondar. In addition, the selection of CBD workers was also performed by kebele leaders in South Gondar than in North Gondar (see Table 5). Awareness about the Community-Based distribution of family planning methods, including the service fee was similarly low in both rural and urban areas. These findings require further exploration by the respective health departments in terms of capacity and information dissemination. What was important was the finding that about half of the overall respondents were not aware of the presence of CBD workers in the localities and Kebele leaders have selected some (18.6%) of the CBD workers (which was against the plan). However, the response from the other community members was lower (13.1%). The response from the CBD workers might be more reliable than the responses from the rest of the community. This is because, the CBD workers could have been informed directly that the kebele leaders have chosen them. One of the problems during selection was that many of the community members were not aware of the situation. The finding that the awareness about the selection was higher in males than in females might be explained by the fact that many women are not supposed to attend meetings in such traditional cultures. Awareness of CBD family planning services was more by males than females. Here, one may speculate that right from the beginning of the selection of CBD workers, females were not involved in the process.

Among those who reported that CBD workers were present in their kebeles, only 34.4% from urban and 34.8% from rural were aware of the service fee which was 0.75 Birr per month per client. On the other hand, the majority (82.0% from urban and 92.2% from rural) of respondents believed that the CBD workers should be paid for the services they render. This could indicate that contraceptive users might be willing to pay as long as the reasons are made clear to them, the cost is reasonable and adjustments can be made on individual basis.

In this study, religions (mainly Orthodox and Islam) have been shown to influence the decision not to use family planning methods (see Table 6). The question was forwarded indirectly to assess their decision ability in the face of opposition by a religious leader. The finding that females were more affected by decisions of religious leaders than males is an area that requires further investigation. One of the explanations that might be given is that females have less chance to engage in dialogues and challenges related to sexuality. Although, in this study, it was found out that females have actually discussed the issue of modern contraceptive methods more than the males. This might show the interest of females in the issue and yet they want to confirm that the practice was not against the will of god. When one makes a closer look into the findings, a single religious leader has an enormous influence on the decision not to use contraceptives. Similar findings were reported in Ethiopia and elsewhere (5,16,17). On the other hand, 53% of the respondents have said that they will take contraceptives irrespective of the words of religious leaders. This finding is supported by other studies conducted in this country. However, its impact and role on decision making may be complex (7,9,18). This is because the decision to use contraceptives requires appropriate support and encouragement from different groups, such as religious leaders, family, neighbors, respected elders, and health professionals (16). The community (as reported by the CBD workers) selected the majority of CBD workers; kebele leaders selected more CBD workers in the rural areas than in the urban areas. This agrees with our previous point where the assumption was that information dissemination was poor. One might expect the problem to be worse in the rural areas due to communication problems. It was found out that some CBD workers had as many clients as 40 and 60, but later on many of them have lost their clients. This has indirectly shown that people have

interest in the services. On the other hand, the high defaulter rate might be related to the poor quality of the services provided. Improving the quality of family planning services through supervision, information provision, better provider competence, good provider/client relationships, and ensuring choice of contraceptive methods could help to increase the number of acceptors as well as to maintain users(3,19-22).

CBD workers in the rural kebeles were not supervised as those in urban areas. This is related to the high defaulter rate in the rural than urban areas as reported by the CBD workers. In addition, those who had gone to clinics to be supervised have maintained their clients than those who did not. This implied that supervision was one of the most important activities to improve the CBD family planning services. Therefore, creating an active supervisory mechanism is essential.

Recommendations

(1) Disseminate information about CBD family planning services before introducing the program into a locality (2) Sensitize religious leaders through meetings and distribution of family planning health education materials (3) Clinics or woreda Health Offices should supervise the CBD workers (active supervision) and (4) give refresher course for CBD workers.

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