

Title:

(i)

A study to Assess the impact of
Community Based Distribution of Contraceptives
(CBD) in rural Kenya.

By

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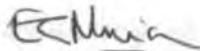


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DECLARATION

This dissertation is my original work and has not been presented for a degree in any other University.

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OCTOBER 1985

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CHAPTER I

INTRODUCTION

In 1979 Kenya's population was estimated to be 15.8 (2) million by 1985 it is estimated to be just over 20 million with a growth rate of approximately 4.1% (4). Now this is all despite Family Planning programmes having been set up over 20 years ago.

In 1969 with a growth rate of 3.3% the total fertility rate stood at 7.6 today it is over 8.1. If the present pattern of growth continues it has been projected that by the year 2000 Kenya shall have a population of probably just over 40 million.

Only about 17% of Kenya's land is arable; (2,20) as a result of the rapid increase in population there is pressure on the land and the people which are Kenya's two main resources. The resulting impact is felt, more so socio-economically where it is difficult to provide:

1. Adequate health facilities and related factors.
2. Adequate educational facilities.
3. Enough employment facilities and the list of other social facilities is endless.

In trying to feed the nation, there is a rapid growth of population with no simultaneous growth of the food provision.

In considering all these factors just mentioned they all sum up to one big problem; hinderance to development. One strategy to help solve this problem could be through the Primary Health Care in which the Community Based Distribution (CBD) of contraceptives is a part. This approach is not a vertical programme but part of what is already going on.

CHAPTER 2

2:1 Background Information

Population is determined by the mortality rate versus the fertility rate as well as migration. In Kenya as a result of improved health and education of the country the mortality has dropped significantly over the years while fertility has remained high, as a result of dropping mortality, more of the children born are surviving resulting in the high increase of population observed.

In 1969 Infant Mortality Rate was 120/1000
In 1979 " " " " 80/1000 (3)

In 1969 with a growth rate of 3.3% Kenya had a population of 10,942,705. In 1984 the growth rate came to about 4.1 % as a result the population is slightly over 20 million.

In 1969 the three provinces with the largest amounts of high potential land and good rainfall (Central, Nyanza and Western) had correspondingly high densities per square km. of arable land (181, 161 and 179 respectively).(3)

The impact of internal migration should also not be overlooked, where there are 2 major types observed:-

- (i) rural to rural (movement from rural areas that are less productive to areas where they are more productive).

(ii) rural to urban (in search of jobs)

In considering religion, the Kenyan population is predominantly christian, the muslim form a small portion of the population and are mainly found along Kenya's coast.(2,3)

2:2 Knowledge and use of Contraceptives

According to the KFS 1977/78 (2) Family Planning has been promoted officially since 1968, through Maternal Child Health and Family Planning services (MCH/FP) and it has been free of charge. Although as early as 1955 Family Planning was offered by Medical Services in Nairobi and Mombasa.(2,20)

By 1978 (ten years later) MCH/FP programme was operating from 505 Clinics and 603 Field education personnel.

In 1978, 30 more Service Delivery Points (SDP's) (these are full time) were established and 181 new field educators were recruited and trained.(1,2):

Of the 505 clinics already in existence 329 were (SDPs) of these

1. 54 operated weekly
2. 112 operated monthly
3. 46 were operated by private organisations

The rest were run by national and municipal government.

A five year goal was set in 1974-1978 to serve 640,000 new acceptors, but at the end of the period less than half this number was achieved as can be seen in the following table:

HEARD OF

EVER USED

CURRENT AGE (YRS)	AT LEAST ONE MODERN METHOD	ONLY TRADITIONAL METHODS	ANY METHOD	ONE MODERN METHOD	ONLY TRADITIONAL	ANY METHOD
15 - 19	73	4	76	3	14	17
20 - 24	88	3	91	11	20	31
25 - 29	90	3	93	16	19	34
30 - 34	89	4	93	17	18	35
35 - 39	89	3	92	14	17	31
40 - 44	88	4	92	12	20	32
45 - 49	83	5	89	9	20	28
All	84	3	88	11	18	29

Table II: All women who had ever heard of and who had ever used contraception by current age (Source KFS 1977 - 1978)

Distances to facilities providing Family Planning services:

To the same group of women in the same survey they were asked how many knew of the existence of a facility providing the services and quite a large percentage (on average 42% knew of a facility, yet only about 12% utilized these services.

For those who had heard of at least one facility they were asked how long it would take to travel to one of the nearest using their normal means of transport one way and answers were as follows:(2):

	<u>average time</u>
Rural	68 mins
Urban	40 mins
Metropolitan (Mombasa and Nairobi)	30 mins

with the knowledge that 80% of Kenya women are rural, it is not surprising that few of them use the facility, since not many are ready to give up over an hour travelling for a service which they perceive of uncertain value and which requires repeated trips to be effective.

Other factors identified in the KFS as having an influence of the use of contraceptives included:-

1. Education although to a small degree
2. Urban/rural difference: the urban woman is 3 times more likely to be using contraceptives than the rural woman.
3. Religion
4. Occupation of the husbands as well as of the wife.

By 1978 despite national policy to promote family planning the user rate within the Ministry of Health was 7% for women using their facilities. Only 9% of women at 'risk' of conception were actually using the service despite the high percentage with knowledge of methods, and location of facility.(2)

In general it appears women have a negative attitude towards fertility control implying, creating an availability of family planning facilities will probably not affect the practise.

2:3 Community Based Distribution (CBD) of contraceptive programmes were introduced in the country when it was felt that there was need to increase the range of alternatives available to the people in terms of the distributors are chosen from within the community from the village level to the divisional level. (8,18)

- Three forms - 1. Depot holder - community come to the distributor for contraceptives
- 2. active distribution - Distributor goes to supply community house to house
- 3. commercial distribution- selling of contraceptives in shops in community.

Apart from distribution of contraceptives these workers are involved in many other health related activities. (5). It has

been shown that they also carry out such services as:

1. Antenatal care in some parts
2. Registration of births and deaths
3. Delivery - TBAs in Karachuonyo
4. Health education
5. Nutrition education
6. Motivation of mobile clinic use
7. Referral to health units
8. Group leadership (especially Maendeleo Ya Wanawake programmes).

Training of the distributors (5,7)

There is a basic training given to those selected as CBD workers: If they are lay workers e.g. women group leaders they undergo training of 3 weeks for supervisors, 2 weeks for distributors. If they had been in the field as Community Based Health Care (CBHC) workers and had already undergone some basic training they had a 2 weeks course and 1 week fresher course. The TBAs were also re-trained for 2 weeks. The training covers the following areas, although some areas are more emphasized by some programmes than others:

1. Organisation of Health services in Kenya and working relations.
2. Maternal and Child Health
3. Immunization
4. Antenatal Care and Post Natal Care

5. Nutrition and Breastfeeding
6. Reproduction Cycle (Menstral cycle normal/ abnormal pregnancies)
7. Data Collection and record keeping
8. Family Planning methods - use of check list, follow up of clients, counselling and referral for family planning.
9. Education and motivation
10. Contraceptive supply and storage
11. Preparation and storage of home visiting kit
12. Programme planning and implementation
13. Organizing a work programme and monitoring
14. Environmental sanitation and water treatment
15. First aid
16. Public relations
17. Role play

In Saradidi Kaseje et al found that 18.6% of the population knew of no method of contraception. Yet 73% had never used contraception. (8)

They also found that if the use of contraceptives was most unpopular in the age group around 20 years (4.3%) while the older women seemed to use it more, 40 years and above are 40%. Of the new acceptors it was found that 16.5% were males and 50% were males and females 83.5% were females, 29 years of age and over. Regarding parity those with 4 or more were the commonest clients.

A general opinion was formed of an increase in acceptor rates from 1% to 40.2% in 4 years.

In conclusion CBD programmes have been successful in some countries of Africa, Tunisia, Egypt and Zimbabwe.(18).

In S.E. Asia (Thailand, Philippines, Malaysia and Indonesia) they have been long used and well developed although it has been documented that incentives have had to be increased in some of these areas (Thailand) for the clients where if a woman stays for 5 years without delivering she is given a trip to the capital city to meet the head of state together with the husband and the state pays for few days stay for the couple which for most of them it is a real privilege.

"Primary Health is essential Health Care made universally accessible to individuals and families in the community by means acceptable to them through their full participation and at a cost that the community and country can afford. It forms an integral part both of the country's health system of which it is the nucleus and of the overall social and economic development of the community". World Health, May 1978.

PHC is an important strategy in Kenya. (7,9) If successful it might help to achieve the Health for all by 2000 and CBD is a fraction of PHC.

Supervision of CBD Programmes: (5)

An important element.

FPAK: Project supervisor visits distributors at work and at home to check - work progress
 - problems
 - records
 - supplies

Once a month supervisors and staff of area office meet to discuss the above and future plans. Some of the problems with supervisors, is that they do other duties not only supervising, these include education and running mobile clinics among others.

MYWO: Supervisor Nurse - arranges meeting with 6 distributors at a time to tackle any issues. Sessions turn into kind of seminars. Main job is supervisory, and they see each distributor two to three times a month.

It was noticed in all these supervisions there was:-

1. Poor record keeping and data collection.
2. Strong back up distributors were in constant contact with their supervisors.

During discussions with distributors to determine the amount of time allocated to CBD activities it was estimated that they worked 3-6 hours per day.

Problems encountered by distributors were found to include (5,6):-

1. Lack of storage facilities
2. Too much walking or large coverage
3. Shortage of stationery
4. Little money
5. Clients asking for drugs
6. Clients have no money to go for T.L. therefore ask distributors for help.

Some positive effects were noted of CBD programmes by Keyonzo in his study (July 1984),(5) these include:-

1. Better accessibility and availability of contraceptives.
2. Change from temporary contraceptives to more permanent contraceptives encouraged.
3. Has some degree of information available on drop out rates with some reasons which could be useful later on in Kenya.
4. There is continuous motivation and interaction between the distributors and the clients.
5. Excellent supervision and back up so far.

Some negative effects or obstacles of the CBD programmes:-

1. Poor information gathering and record keeping.
2. Logistics not well covered.

3. Lack of supportive educational materials.
4. Need of co-operation between the programmes and Ministry of Health services to be strengthened.

Other issues arising on the distributors (11,18):-

1. The question of voluntary working
- are incentives for the distributors necessary for the success of the projects.
2. What can the community do in participating with the programme: To categorize the programme as community based.

2:4 Justification of the Study:

1. Family planning programmes established in Kenya as early as 1966, but despite this the birth rate continues to rise so that the population is increasing at a fast rate as exemplified by the Kenya Fertility Survey results of 1977-1978 where it is shown that the Crude Birth Rate went up from 49.6 in 1969 (Pop. Census) to 54.6 in 1977 (Demographic Survey). The Community Based Distribution of contraceptives is a new programme the oldest being about four years old (5), it is worthwhile to know the problems

associated with it in the areas where it has been going on, so that if it is to be introduced in other areas there are foreseen problems and something can be done about these where possible: No evaluation of this has been done yet.

2. It is the community that will determine the success of the programme. But Kenya is a country of many different ethnic groups with different cultural backgrounds, but three of the largest ethnic groups the Kikuyu, Luhya and Luo could greatly influence the trend of population as they are the largest in the population, so it would be worthwhile to start with one or more of these three.
3. Kenya's population is 80% rural so if the programme could be estimated amongst these 80% it could be one step ahead in the population problem.

CHAPTER 3

OBJECTIVES

3:1

General Objective:

To study the effectiveness of Community Based Distribution (CBD) of contraceptives and acceptance of this strategy by the people utilizing these services and factors affecting these services.

Specific Objectives:

1. To determine if the contraceptives offered by this system (CBD) are appropriate and assess the effectiveness of different delivery systems.
2. To determine the characteristics of the people utilizing the services:-
 - (a) Sex
 - (b) Age
 - (c) Education
 - (d) Marital Status
 - (e) Religion
 - (f) Parity
3. To establish the attitude of the people using the services especially as relates this system to the facility based system of distribution of contraceptives.
4. To assess the reasons for dropping out, and characteristics of the people dropping out.

CHAPTER 4

METHODOLOGY

4:1 Study Area and Population

The proposed study was carried out within the framework of the Community Based Distribution of contraceptives programmes already in the country.

Taking only three of the regions in the programme, being funded by the 3 different organisations to be compared, covering two ethnic groups in Kenya with some of the highest growth rates in the country, in (Luo, Luhya) Western Kenya.

The areas are:

- (i) VIHIGA - in Kakamega District with a population of 254940 with a density of 692/sq. km (3). The CBD programme was established in 1980 and is run by Family Planning Association of Kenya (FPAK). It covers 15 sublocations in South Maragoli and West Maragoli
- (ii) EMUHAYA - in Kakamega District with a population of 60952 with a density of 627/sq.km (3): The programme here was started in 1980 and is run by Maendeleo

Ya Wanawake (MYWO). It covers
6 sublocations in West Bunyore.

- (iii) SARADIDI - in Siaya District
with a population of 50,000,
with density of 250/sq.km.(3)
and is run by a church organisation.
This programme was started in
1980. It covers East and West
Asembo locations with one
Sublocation (Ndori) in Bondo
Division.

(N.B. Figs of 1979 Census).

4:2

SAMPLING DESIGN

Only about 7% of Kenya's population uses contraceptives. It must be a much lower figure probably around 4% in the rural area. Working on the assumption that probably around 20% of the people in the rural areas make use of the CBD programme; with 95% confidence limit a minimum sample size was calculated to about 256. A sample size of 300 was taken.

Using the records available in each of the study areas from the area supervisors, a sample of 200 clients aged between 15 years - 49 years was systematically selected from the continuing acceptors of females and 15 years and over of males. At the same time using the latest records of drop outs 100 were systematically sampled from each of the study areas, aged between 15 years and 49 years for females and 15 years and above for males. A drop out was considered as a person who used any form of contraceptive for a minimum period of six months and then stopped. A user was considered as somebody who had used any form of contraceptive for a period of at least three months continuously and was still using.

Questionnaires were administered to each of these clients (appendix A) and to the dropouts (appendix B).

At the end of administrative of questionnaires using the information obtained it was then possible to fulfil the last objective of comparing all the factors contributing to the programmes and therefore compare the positive and negative sides of the different delivery systems.

In each of the areas under study an open discussion was held between the investigator and the distributors in each of the areas as regards the work progress and problems encountered and possible solutions to some of the problems. And a report on this was also written.

Thus the study was carried out by questionnaires and observation.

4:3

DATA ANALYSIS

Data was collated and summary tables drawn up to show the distribution of the main demographical variables (age, sex, marital status, parity, religion, education). With respect to contraceptive use for each of the study areas. Preliminary analyses using the proportions of the distributions and the standard error of the difference (SED) between them, to find the similarities and differences between and within each of the study areas. Further analyses using (χ^2) chi square for categorical data and correlations and regressions for continuous data was carried out to find if there is any association between the variables and test whether such associations could have been casual.

4:4

BASIC ASSUMPTIONS

1. All those involved in the study get their supply of contraceptives from the CBD project.
2. In considering demographic variables since the study is in a typical rural setting it is assumed that a majority of the population here is involved in peasant farming and only a very small percentage is in any form of formal employment, thus occupation would be meaningless in this situation; so it is not included.
3. By using the records of the area supervisors, it is assumed that it would be a more upto date list, as it appears that they give monthly reports which are to some degree not upto date as alot can happen with one month in any given area.
4. The group of people contributing to fertility in the country are mainly women aged 15 years to 49 years whereas males are sexually active from 15 years and into the late ages, thus no upper limit has been considered for males.

CHAPTER 5

5:1

Results:

After two months in each of the Study Areas:

- A: Saradi di - April and May 1985
- B: Vihiga - June and July 1985
- C: Emuhaya - August and September 1985

200 continuing users had been identified and interviewed in each of the areas, and 100 defaulters also in each of the areas.

Defaulters is used interchangeably with dropout here after giving a total number of 900 interviews carried out.

Saradi di covered East and West Asembo Locations in Siaya District with one Sub-Location Ndori in Bondo Division.

Vihiga covered 15 Sub-Locations in South and West Maragoli.

Emuhaya covered 6 Sub-Locations in West Bunyore.

This rendered the following observations:

5:2

On the characteristics of the people utilizing these services the following observations were made:

(a) Sex:

In all the 3 areas looked at, more than 80% were females. In relation to each district population where the work was done, there was no significant difference noted in all 3 areas statistically, in the female:male ratio utilization. (See Table 3).

	SARADIDI			VIHIGA			EMJHAYA			
	NO.	F	M	Totals	F	M	Totals	F	M	Totals
Users		177	23	200	187	13	200	184	16	200
	%	88.5	11.5	100	93.5	6.5	100	92	8	100
Di stri ct	No.	259458	215058	474516	540949	489938	1030887	540949	489938	1030887
	%	53	47	100	49.8	50.2	100	49.8	50.2	100
Defaulters	%*	82	12	100	91	9	100	97	3	100

* In considering Defaulters because denominator is 100 only the % has been considered.

Table 3:

The di stri buti on by sex among the users and defaulters in the study population and the di stri ct populati on by sex.

	Z Value	P Value
A Vs B	= 1.75	P = 0.080
A Vs C	= 1.18	P = 0.230
B Vs C	= 0.58	P = 0.562

	Ratio M:F
Area A	1:7
Area B	1:14
Area C	1:12

Table 4:

Shows a summary of Male distribution between the study areas and the ratio M:F in each of the study areas.

The same case applied to the dropouts in all the three areas.

(b) Age:

Considering the age groups in 3 categories, the youngest (15 - 19 years) those in the middle (20 - 39 years) and the older age group, 40 years and above. (See table 5).

In all the 3 areas, it was noted that the proportion of people in that age group for that particular district, was lower for the younger age group (15 - 19 yrs) for all the 3 areas, in relation to distribution of that population. It was higher for the age group (20 - 39 yrs) in area A and area B, but lower for area C in relation to district populations. It was lower for the age group 40 years and above in areas A and C but higher in area B in relation to the district population.

Age Group	Saradi di					Vi hi ga					Emuhaya				
	Users		Defaul ters	Di st. Pop.		Users		Defaul ters	Di st. Pop.		Users		Defaul ters	Di st. Pop.	
	No.	%	%	No.		%	%	No.	%		No.	%	%	No.	
15 -19	16	8	2	51859	23	1	0.5	0	121110	27	0	0	0	121110	27
20 -24	24	12	32	30979	14	16	8	9	79018	16	31	15.5	6	79018	16
25 -29	44	22	18	25837	13	29	14.5	21	56917	13	57	28.5	43	56917	13
30-34	49	24.5	19	22336	10	48	24	34	43336	10	67	33.5	33	43336	10
35-39	34	17	12	18475	8	48	24	22	35845	8	35	17.5	13	35845	8
40-44	12	6	7	19945	9	27	13.5	8	32508	7	4	2	2	32508	7
45-49	4	2	2	19534	9	18	9.0	4	29668	7	4	2	0	29668	7
50 +	2	1	2	61313	13	1	0.5	0	99471	7	0	0	0	99471	7
Not Spe- ci fied	15	7.5	6	1653	1	12	6	2	2090	5	2	1	3	2090	5
Totals	200	100	100	251931	100	200	100	100	499963	100	100	100	100	499963	100

Table 5:

The age distribution in each of the study areas for the users, defaulters and the District Population.

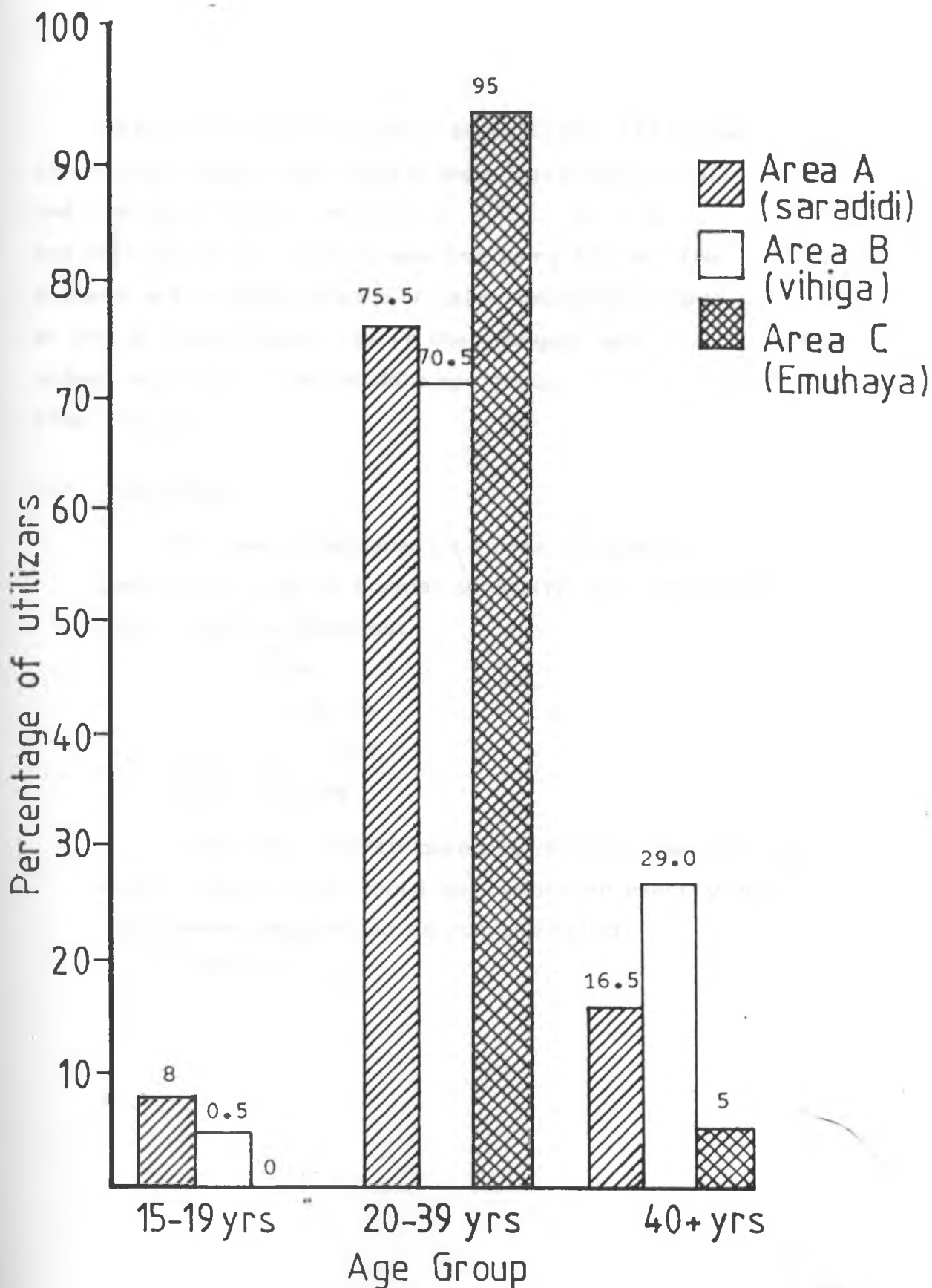


Fig.1: Shows the pattern of utilization of all contraceptives combined at different age structures in all 3 areas of study.

Statistically there was a significant difference in the utilization at the different age groups in all the 3 areas of study (where $P < 0.05$). So that the pattern of utilization was the same for all the 3 areas with the percentage of users being different at the different ages, few in the youngest and oldest and most in the middle age group. (See fig. 1).

(c) Education:

This was considered in terms of number of years completed of formal schooling and categorised into 4 main categories.

- (i) None
- (ii) 1 - 4 yrs
- (iii) 5 - 7 yrs
- (iv) 8⁺ yrs

There was a fifth category of those who did not wish to disclose or could not remember exactly and these were categorised as non specified.

No. of yrs completed of formal education	Saradi di					Vi hi ga					Emuhaya				
	Users		Defaulters	Di stri ct		Users		Defaul - t ers	Di stri ct		Users		Defa - ulters	Di stri ct	
	No.	%	%	No.	%	No.	%	%	No.	%	No.	%	%	No.	%
None	29	14.5	33	126439	58	26	13.0	14	210848	42	24	12.0	4	210848	42
1 - 4	49	24.5	19	39596	18	62	31.0	19	84609	17	32	16.0	25	84609	17
5 - 7	88	44.0	44	29039	13	91	45.5	49	132694	27	121	60.5	54	132694	27
8 ⁺	28	14.0	4	20593	9	21	10.5	15	65777	13	18	9.0	17	65777	13
Not spe- cified	6	3.0	0	1559	2	0	0	3	2887	1	5	2.5	0	2887	1
Total	200	100	100	217226	100	200	100	100	496815	100	200	100	100	496815	100

Table 6:

The distribution of the users and defaulters according to their level of education, and that of the district population.

The pattern of utilization here was again the same in all the 3 areas as seen in Table 6. Statistically there was a significant difference at all levels in all the 3 areas of study. ($P < 0.05$)

The proportion of users in relation to the proportion of people in that district at that level of education was as follows:-

- lower for those with no education.
- higher in all the other 3 categories (i.e. 1 - 4 yrs, 5 - 7 yrs and 8 yrs and over in area A, but in area B and C the proportion of users was lower for those with 8 yrs and above than for the general population.

As regards the dropouts the education level followed the same pattern in all the 3 areas, with most dropouts having between 1 - 7 yrs of education highest in 5 - 7 age group.

(d) Marital Status:

In all the 3 areas studied 4 categories were considered those who were

- (i) never married
- (ii) married currently (by tradition/church/cohabiting)
- (iii) widowed
- (iv) separated or divorced
- (v) Not specified

In all 3 areas more than 80% were currently married, the rest of the categories formed 20%. (See Table 7)

Marital Status	Saradi di					Vi hi ga					Emuhaya				
	Users		Defaulters	Di stri ct		Users		Defaulters	Di stri ct		Users		Defaul - ters	Di stri ct	
	No.	%	%	No.	%	No.	%	%	No.	%	No.	%	%	No.	%
Never Marri ed	24	12.0	9	1407	7	13	6.5	14	3576	8.0	22	11.0	5	3576	8.0
Currently Marri ed	137	68.5	74	19103	90	165	82.5	65	40750	89.0	163	81.5	90	40750	89.0
Wi dowed	28	14.0	14	353	1.2	13	6.5	11	447	0.9	8	4.0	2	447	0.9
Separated/ Di vorced	8	4.0	3	366	1.7	7	3.5	9	1026	2.0	7	3.5	3	1026	2.0
Not Speci - fi ed	3	1.5	0	11	0.1	2	1.0	0	70	0.1	0	0	0	70	2.1
Total	200	100	100	21240	100	200	100	100	45869	100	100	100	100	45869	100

Table 7:

Marital status of users, defaulters and the District Population.

Between Areas A Vs B and

Area A Vs C there is a statistical significance in relation to the utilization as relates to marital status in areas B Vs C there is no statistical significance.

In relation to dropouts there is no statistical significance in relation to the marital status in Areas A and C. But in area B there is a statistical difference:

Area	χ^2 at 4 df	P value
A	2.5	$P > 0.10$
B	13.0	$P < 0.010$
C	4.1	$P > 0.10$

Table 8:

Summary of marital status between users and defaulters in each of the study areas.

So that in	χ^2 at 4 d.f.	P value
A Vs B	11.6	$P < 0.010$
A Vs C	16.5	$P < 0.005$
B Vs C	5.5	$P > 0.10$

Table 9:

Summary of marital status within and between the study areas for users.

(e) Parity:

In all the 3 areas those who had no children utilized the services in very low proportions in relation to the district proportions with no children. (See Table 10)

In area A a higher proportion of utilizers were found among those with 1 - 4 children but in area B and C in relation to the district proportion there were fewer utilizers.

Among those with 5 - 9 children there was a much higher proportion of users as compared to the district population within that parity group.

In Area A there was a higher proportion of users among those with 10⁺ as compared to the general population but in areas B and C there was a lower proportion of users in this category in relation to the general population.

	Saradi di					Vi hi ga					Emuhaya					
	Users		Defaul - ters	Di stri ct		Users		Defa - ulters	Di stri ct		Users		Defaul - ters	Di stri ct		
	Parity	No.	%	%	No.	%	No.	%	%	No.	%	No.	%	%	No.	%
None	2	1.0	0		10,000	15.0	0	0	0	10,000	18	0	0	0	10,000	18
1-4	43	21.5	37		8,570	12.0	45	22.5	30	24,704	44	39	19.5	49	24,704	44
5-9	123	61.5	49		42,167	59.0	114	57.0	52	16,358	29	144	72.0	39	16,358	29
10 ⁺	32	16.0	14		10,258	14.0	41	20.5	18	4,681	9	17	8.5	12	4,681	9
Total	200	100	100		70,995	100	200	100	100	55,743	100	200	100	100	55,743	100

Table 10:

Parity of users, defaulters and that of the District Population.

There was a significant difference at the different levels in all the 3 areas. ($P < 0.003$)

(f) Religion:

This was categorised into 3 main groups

- (i) Protestant
- (ii) Catholic
- (iii) Muslim
- (iv) Other

These groups each contained several other sects which were more or less the same e.g.

Protestant included - Anglican
 - Pentecostal
 - Quackers
 - Presbyterian
 - etc.

Catholic - Roman Catholic
 - Legio Maria
 - etc.

Muslim - were just one category

Other included those that could not ideally fit into any of the 3 above they included - Divine
 - Israel Nineveh
 - Seventh Day Adventist
 - etc.

As can be seen in Table 11, in all the 3 areas studied the christian denominations dominated, (> 90% of the population). The muslims were only found in two of the areas A and B, and even then they were concentrated in a very small area. In area C it was predominantly christian.

In the study areas most of the users were christians 70% in all the three areas: As regards the dropouts again more than 70% of dropouts were christians. But again these were the highest proportion of users. (See Table 11).

Religion	Saradi di			Vi hi ga			Emuhaya		
	Users		Defaulters	Users		Defaulters	Users		Defaulters
	No.	%	%	No.	%	%	No.	%	%
Protes- tant	145	72.5	59	152	76	78	184	92.0	95
Catholi c	35	16.5	24	5	2.5	3	3	1.5	1
Muslim	10	5.0	3	4	2	1	0	0	0
Other	10	5.0	14	39	19.5	18	13	6.5	4
Total	200	100	100	200	100	100	200	100	100

Table 11:

The Di stribution of the users and defaulters in each of the study population according to religions.

There was a statistical significance within the study area and between the study area for clients.

	χ^2 3 d.f.	P value
A Vs B	= 42.3	$P < 0.005$
A Vs C	= 41.9	$P < 0.005$
B Vs C	= 20.5	$P < 0.005$

Table 12:

Summary of religion between the study areas.

But there was no statistical significance within each study area between the clients and dropouts in A and B.

	χ^2 3 d.f.	P Value
A	= 1.05	$P > 0.10$
B	= 0.57	$P > 0.10$
But in C	= 16.847	$P < 0.005$ there was

a statistical significance.

Table 13:

Summary of religion as it relates between users and defaulters.

	A	B	C
Average ratio of M:F	1:7	1.14	1.12
No. of married people (male & female) (and %)	137(68.5%)	165(82.5%)	163(81.5%)
Total No. in age group contributing to fertility most (20-39 yrs) (and %)	151(75.5%)	141(70.5%)	190(95%)
Desired family size mode (and %)	> 4(64%)	> 4(55.5%)	> 4(67.5%)

Table 14:

Some basic characteristics of the study population:

Characteristics of users and defaulters in all the 3 areas.

Desired Family Size and Last Delivery

More than 50% of the study population desired a family of more than 4 children, the sex was not differentiated in all the study areas. (See Table 15 a)

In areas B and C more than 30% did not wish to comment on the desired number whereas in area A more than 30% desired a small family size i.e. 1-4.

	Saradi di			Vi hi ga			Emuhaya		
	Users		Defaulters	Users		Defaulters	Users		Defaulters
	No.	%	%	No.	%	%	No.	%	%
Desi red fami ly si ze									
None	0	0	-	2	1.0	-	0	0	-
1-4	34	17	-	15	7.5	-	5	2.5	-
4	128	64	-	111	55.5	-	135	67.5	-
Any No.	25	12.5	-	23	11.5	-	28	14.0	-
Don't Know	13	6.5	-	49	24.5	-	32	16.0	-
Totals	200	100	-	200	100	-	200	100	-

Table 15 a :

Desi red fami ly si ze among users

Whereas in relation to the last delivery in area A and C $> 60\%$ of the study population had had their last delivery within the last two years. But in area B, $> 60\%$ had had their last delivery more than two years before. (ref. to table 15 b).

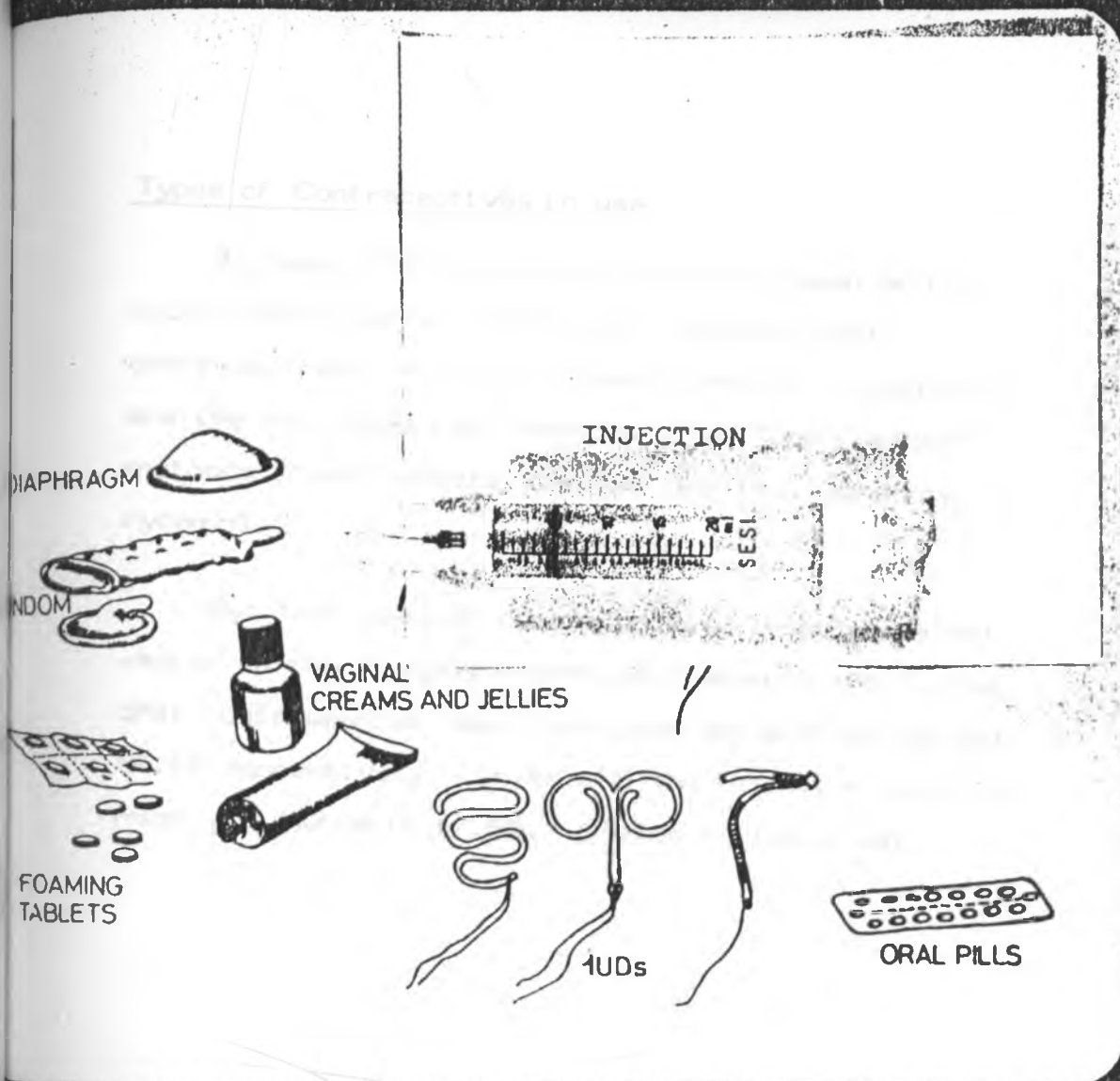
In relation to dropouts this was statistically significant ($P < 0.005$).

	Saradi di			Vi hi ga			Emuhaya		
	Users		Defaulters	Users		Defaulters	Users		Defaulters
Last Delivery	No.	%	%	No.	%	%	No.	%	%
1 yr ago	51	25.5	49.0	29	14.5	39	69	34.5	50
1 yr 2 yrs	90	45.0	24.0	44	22.0	27	79	39.5	9
More than 2 yrs ago	59	29.5	27.0	127	63.5	34	52	26.0	41
Totals	200	100	100	200	100	100	200	100	100

Table 15 b:

Last delivery of users and defaulters.

THE BEST FAMILY PLANNING METHOD IS THE ONE THAT SUITS YOU!



FOR HEALTH AND PROGRESS: PLAN YOUR FAMILY

Fig 2: Some of the types of contraceptive methods made available by the CBD programme.

5:3

Types of Contraceptives in use

At least 70% of the population in each of the study areas used an "efficient" method (oral contraceptives, I.U.C.D., sterilization, injection) and the rest used the "temporary" or "inefficient" methods (foam tablets, vaginal jellies, condoms, rythmn).

But the types of contraceptives most prevalent varied in the 3 study areas, with area A and C, the oral contraceptive was more popular with 60.5% and 69.0% respectively. In area B the injection was the most popular with 57.5%. (Refer to table 16).

Type of Contraceptive	Saradi di			Vi hi ga			Emuhaya		
	Users		Defaulters	Users		Defaulters	Users		Defaulters
	No.	%	%	No.	%	%	No.	%	%
OC's	121	60.5	56	40	20.0	44	138	69.0	58
IUCD	18	9.0	8	16	8.0	14	17	8.5	16
Condoms	24	12.0	18	12	6.0	8	16	8.0	3
Foam tabs	12	6.0	14	7	3.5	5	4	2.0	10
Jelly	3	1.5	4	0	0	0	3	1.5	8
Foam tabs + Condoms	7	3.5	0	4	2.0	1	8	4.0	0
Jelly + Condoms	12	6.0	0	0	0	0	0	0	0
T.S.	1	0.5	0	5	2.5	0	3	1.5	0
Vasectomy	0	0	0	1	0.5	0	0	0	0
Injection	0	0	0	115	57.5	28	11	5.5	5
Rythmn Method	2	1.0	0	0	0	0	0	0	0
	200	100	100	200	100	100	200	100	100

Table 16:

Types of contraceptives in use and the distribution among the clients and the defaulters.

Contraceptive use in relation to duration, without categorizing the specific type of contraceptive in use, it was observed that more than 50% of the users had utilized for at least 9 months, and in area A and B at least 30% had utilized for more than 24 months whereas in area C only 17% had utilized for the same length of time. (See Table 17)

In area A and B more than 50% had dropped out before 9 months use whereas in area C only 39% had dropped off. And over all in all 3 areas,

60% had dropped off in a period of 6 - 24 months. (See Table 17).

	Saradi di			Vi hi ga			Emuhaya		
	Users		Defaulters	Users		Defaulters	Users		Defaulters
Duration of use	No.	%	%	No.	%	%	No.	%	%
9 mths	43	21.5	60	44	22.0	51	29	14.5	39
9-24 mths	93	46.5	22	93	46.5	31	134	67.0	44
24 mths	60	30.0	18	60	30.0	18	34	17.0	17
Not specified	4	2.0	0	3	1.5	0	3	1.5	0
Totals	200	100	100	200	100	100	200	100	100

Table 17:

Duration of use of any form of contraceptive.

This was statistically significant :

A Vs B	χ^2 at 1 df = 145.5	$P < 0.005$
A Vs C	χ^2 at 1 df = 7.519	$P > 0.010$
B Vs C	at 1 df $\chi^2 = 136.9$	$P < 0.005$

Table 18:

Summary of the contraceptives in use between the study areas.

In relation to dropouts in all the 3 areas the highest dropout was noted with the oral contraceptive, where it was observed 56%, 44% and 58% for areas A, B and C respectively.

In all these observations there was a statistical significance noted.

A	$= \chi^2$	= 48.817	$P < 0.005$
B	$= \chi^2$	= 26.0802	$P < 0.005$
C	$= \chi^2$	= 23.6816	$P < 0.005$

Table 19:

Summary of contraceptive use among the defaulters within each study area.

	A	B	C
1. Oral contraceptive percentage of users (% dropouts)	60.5%(56.0%)	20.0%(44%)	69.0%(58%)
2. Injection % of users (% of dropouts)	0%(0%)	57.5%(28.0%)	5.5%(5%)
3. Other Methods of users(% of dropouts)	39.5%(44%)	22.5%(28.0%)	25.5%(37%)

Table 20:

Contraceptive methods used by the study population:-

Comparison of users and defaulters (dropouts) in all the 3 areas

Choice and accessibility of the contraceptives for the users

In more than 80% of the users for all 3 areas it was the choice of the client. In more than 80% cases they were easily available when needed, in the few cases where they were not available it was the clients failure to get resupply.

(See Table 21)

	Saradi di		Vi hi ga		Emuhaya		
	Users		Users		Users		
	No.	%	No.	%	No.	%	
Clients Own Choice	Yes	185	92.5	171	85.5	183	91.5
	No	15	7.5	29	14.5	17	8.5
Totals		200	100	200	100	200	100

Table 21:

Clients choice of contraceptive among users.

	Saradi di		Vi hi ga		Emuhaya		
	Users		Users		Users		
	No.	%	No.	%	No.	%	
Readily accessible or available	Yes	196	98	165	82.5	197	98.5
	No	4	2	35	17.5	3	1.5
Totals		200	100	200	100	200	100

Table 22:

Availability of the contraceptives for users.

Reasons for not being readily accessible or available	Saradi di		Vi hi ga		Emuhaya	
	Users No.	%	Users No.	%	Users No.	%
Di stri butor not easy to contact	0	0	15	42.9	2	66.7
Di stri butor does not have them all the time	0	0	4	11.3	1	33.3
Di stri butor refuses to give them	0	0	0	0	0	0
Too busy to go for them	4	100	1	2.9	0	0
Other (forgot, went to another town etc.)	0	0	15	42.9	0	0
Totals	4	100	35	100	3	100

Table 23:

Reasons for non-availability of contraceptives.

5:4

Preferable Source for the contraceptives and attitude towards the distributors:

A look at table 24 shows that in more than 60% cases in all 3 areas, the users preferred the services being brought to them rather than seek the services from a health institution (health centre, dispensary, hospital). Among the defaulters who wished to restart the use of family planning contraceptives 56% in area A and 58% in area B, about 45% of them preferred to use the CBD services, 55% either were not committed or preferred the health institutional services. But of the 77% in area C who wished to restart, 87% preferred the use of the CBD services. (Refer to Table 26).

		Saradi di		Vi hi ga		Emuhaya	
		No.	%	No.	%	No.	%
Preferable Source	VHW	170	85.0	129	64.5	183	91.5
	Health Institution	30	15.0	71	35.5	17	8.5
	Totals	200	100	200	100	200	100
Comment on VHW	Useful	196	80.0	184	92.0	139	69.5
	Not useful	0	0	2	1.0	15	7.5
	No comment	4	20.0	14	7.0	46	23.0
	Totals	200	100	200	100	200	100
On Maintenance of VHW	Willing to contribute	80	40.0	40	20.0	123	61.5
	Govt or other organisations should pay	116	58.0	120	60.0	49	24.5
	Undecided	4	2.0	40	20.0	28	14.0
	Totals	200	100	200	100	200	100

Table 24:

Source preference for the contraceptives among the users and their comments on the VHW and their maintenance.

In all the 3 areas, the users felt that the distributors were playing a useful role in at least 60% of the cases. The rest either remained uncommitted to answer and a very small % (0, 1.0%, 7.5%) felt they could do without them. But a very small proportion were willing to contribute towards the maintenance of the distributors (40%, 20%) in area A and B, but in area C 60% felt that they could, within limits, be willing to maintain them. In area A and B more than 55% of the study population felt that they should be paid by the Government or other organisations like the church and other voluntary bodies, compared to 24.5% having the same feeling in area C.

An open discussion with the distributors in all the three areas yielded the fact that they all felt they should be paid.

In area B and C they strongly felt they should along with contraceptives have basic first aid kit to treat few complications like panadol for dysmenorrhoea and for the children.

In all the three areas they felt they needed more courses or seminars to put themselves up-to-date.

5:5

Reasons for dropout :

In the study population the reasons for the dropouts varied: (Refer to Table 25)

	Saradi di	Vi hi ga	Emuhaya
Reasons	% of defaulters	% of defaulters	% of defaulters
Failure of method	8	13	15
Medical complication	9	8	30
Wanted another baby	23	10	27
Husband/wife refusal	29	18	3
Failure to get supply	9	3	3
Other (rumours, forgetting, fed up)	22	48	13
Totals	100	100	100
Interested in later use	Yes 56	58	77
	No 27	23	8
	Not specified 17	19	15
Totals	100	100	100

Table 25:

Reasons for dropping out among the defaulters and the interest in later use of contraceptives.

In area A more than 50% were for spouse refusal, the majority being husbands refusal, (29%) combined with wanting another baby (23%).

In area B again > 50% for spouse refusal (18%) and other reasons, (which were mainly rumours on the effects of the contraceptives both immediate and long term, and a few forgetting to get resupply on time) (48%).

In area C most were due to medical complications (30%) and wanting another baby (27%).

There was a significant proportion with failure of method (8%, 13%, 15%). In more than 50% of the cases the method that was implicated was the I.U.C.D. (75%, 69.2%, 53.3%) for areas A, B and C respectively.

More than 50% of the dropouts wished to reuse a method of contraception at a later point. (See Table 23).

Type of contraceptive	Saradi di		Vi hi ga		Emuhaya	
	No.	%	No.	%	No.	%
OC's	30	54	13	22	25	32
IUCD	16	29	4	7	7	9
Foam Tablets	4	7	1	2	5	6
Injection	4	7	40	69	15	19
Tubal sterilization	2	3	0	0	0	0
Not specific	-	-	-	-	25	34
Totals	56	100	58	100	77	100
Source						
VHW	25	44.6	25	43.1	67	87
Health Institution	31	45.4	33	46.9	10	13
Totals	56	100	58	100	77	100

Table 26:

Type preference of contraceptives among those who wish to reuse among the defaulters and the source they would like to use in all the 3 study areas.

CHAPTER 6

Discussion:

6:1

Determining the causes of fertility decline is a difficult issue. But several factors can be looked at, although these may be looked at independently at first, they should be correlated along the way to explain what is observed and may be provide an explanation as to what is happening in the fertility trend.

Family Planning programmes have lowered fertility in a number of developing countries some more clearly than others(14). Kenya is one of the three countries in the developing nations (others are Pakistan and Nepal) in which family planning programmes have had little impact, with the Crude Birth Rate (CBR) being the highest in the world (55/1000) as per 1982. It has been suggested that this is as a result of the weakness of the programmes which does not appear to be accessible or made easily available. Since the country has the co-operation of the government fully with stronger programmes they could have a greater impact, if they were to work hand in hand with other agencies providing the services to make them more affordable, available and acceptable by the population being served.

6:2

In this study three different non-governmental organisations, providing family planning services were looked at. They included -

- (i) a church organisation
(Saradidi in Siaya District)
- (ii) Family Planning Association of Kenya
(FPAK) in Vihiiga of Kakamega District.
- (iii) Maendeleo ya Wanawake Organisation
(MYWO) in Emuhaya of Kakamega District.

The 3 areas under study were all densely populated areas, with more or less the same cultural backgrounds and almost similar socio-economic status, where most of the people living there at the time of study were involved in peasant farming, and being in the rural area most of the people in any formal type of employment were teachers and others clerical or small scale business people.

The three organisations, were under three different administrations, with each having their leaders within the area. Their task was one which was to provide family planning services to the people at the village level, but their approach to solving the issue was a bit different in some aspects and similar in others as will be seen in the observations made to answer the issues of concern.

6:3

In looking at the demographic characteristics of the study population, it can be observed that there were less males than females utilizing the services provided by CBD programme. This could be attributed to several factors: An important contributory factor may be the idea existing in African culture where the male has an upperhand in deciding what is to be done in the home, as will be seen later among the defaulters, a considerable percentage blamed their dropping out to objection by their husbands. If men do not wish to allow their spouses to practice family planning, there is no way they themselves are going to use the services.

The majority of the types of contraceptives being used are for females. The males have only two options, condoms and vasectomy which are not very appealing to the male in general, leave alone the African male. There could be many more reasons for the disparity in the ratio of male:female utilization, but these two mentioned were among the most outstanding reasons observed.

In relation to age it is observed that the trend is the same again for all the three study areas. When considering the study population in three categories, the young but contributing to fertility significantly

(15-19 yrs), the age group that is considered in most studies (14,19) to contribute most to fertility 20 - 39 years and the older ones who are still capable of contributing to fertility but to a lower scale than the previous two, 40 years and above; it is observed that in all the three areas, the proportion of people in the study population 15 - 19 years utilizing the services is lower than the proportion of people in that age group in the area who would be expected to be utilizing the services. Several observations could explain this phenomenon. During the defaulter interviews it was observed that, a significant number of the defaulters stopped using the services due to rumours associated with the use of contraceptives. This is not an issue of Kenya alone. (13) It is an issue in some parts of the developed world, where some of the hormonal contraceptives have been implicated in cases of malignancy, and when followed up it has been found that this may be in a single case where there were other underlying co-existing contributory factors. In the developing world, it has been observed that, there is considerable exaggeration on the issues on complications of contraceptives are out blown, and these are usually false and as a result of gathering together, especially of women. This is especially a problem as relates to OC's and Condoms, Injections and I.U.C.Ds. With OCs and Injections in the study population, it was believed that in the former, once you ingest

they are not removed from the body, instead they gather up in your uterus and a woman can never be capable of conceiving again. As for the latter method, it was felt that the injection goes and kills all the eggs in the ovary so after several injections one stops bleeding and is not capable of ever conceiving again. And yet these are the contraceptives being provided by the CBD programme.

Now looking at the age groups, this can explain why the younger age group who should have been using the services felt they should not. The majority felt they should first have the number of children they wanted before being put on any method. The majority of the people using these services had five or more children and were older, this could be that they felt that since they already had many children, even if they were never to give birth again, it would not really ^{affect} them much.

Rumours are difficult to stop circulating because they are usually spread through "reliable" friends and relatives; But through effective communication, these could be limited. (13,18). Where education to the would-be users and the continuing users should be delivered in an appropriate manner, using multiple interpersonal and mass media, involving the community by use of leaders setting an example, the distributors

themselves and other satisfied users. The health personnel should be in a position to give correct information all the time and to anybody without degrading or creating a picture of looking down upon the distributors in this case who are lay educators. In this regard, the lay educators need more frequent workshops and seminars to improve and widen the scope of their knowledge in their workfield.

It must not be overlooked that, at the moment ~~with the increase in the number of school attendances~~ at the age group 15-19 years, most of these are still at the school going age, so they are supposedly not involved in sex too much. So that even the few who would feel they need the services, being still at school they are not really in a position to approach the distributors for supply, there may be a few who use them but secretly. Marriage age is tending to be extended into the 20's but the few, who have the misfortune of not continuing with school either as a result of pregnancy or as a result of other socio-economic factors are the ones who really need the services as they are susceptible. In Saradi di it was noticed there was a higher percentage of use in this age group this could be attributed to the kind of distributors existing here, where they have peer motivators, males and females so that

they approach individuals in their kind of circle. In Vihiga it was said that anybody below 19 years who was not married and wished to use the contraceptives had to be accompanied by their parent or guardian on the first visit. This is all very well for cultural purposes where it was felt that it decreases the number of youngsters being involved in immoral deeds, but practically does the latter happen? So that leaves the question is this move really necessary? In Emuhaya, all the distributors are women group leaders, this puts them into the category of "older" women in society: with the cultural respect existing among the African, it would be disrespectful for a youngster who approaches an elderly woman to ask for contraceptives when she knows she is not married or when she feels she cannot have confidence in the provider keeping a secret as this would most likely be secret contraceptive use. There were very few cases of mothers who appeared like they would not mind their young daughters using contraceptives.

In all the study areas, most of the older women, of over 40 years felt they are not capable of becoming pregnant anyway, so they felt there was no need of using these modern forms of contraceptives. Although in Vihiga and in Emuhaya areas there were quite a good proportion utilizing the services, as compared to the Saradi di area. It could be in the latter area as women get into the older age group, they are not as sexually active as compared to the other two areas.

Over all, it was a good observation that there was a large proportion of users in the age group 20 - 39 yrs. But the question is, these people are already multiparous, is there something that could be done to encourage them to use the contraceptives before they become multiparous? May be if some of the already mentioned problems (rumours, improper education, educating of lay educators) could be solved, this could help. In all the population study this group was the largest users, but this could be as a result of feeling they already have enough children, so they felt they did not really mind the long term effects of the contraceptives if any. Due to their young ages, they also know that they are at risk of pregnancy. On the other hand, these are mainly married women in the modern world of inflation with limited sources of income. They have had some little formal education and they realise the strain they are faced with, they are concerned about what is going to happen tomorrow, they would like their children to have what they missed, so they think in terms of limiting their families. On marital status, most of these women are married, the few who are single either due to separation or death or having never married is a very small proportion. So the question of use

of contraceptives mainly for immoral purposes does not seem to arise in this study population.

It is a good fact that most of the people (80%) who have somebody living with them permanently (married) is protected as this one is at a higher risk of conceiving than somebody who has no permanent partner. Although it must not be forgotten that most of these women, although married, the majority of them their husbands were not around all the time, as they are in the towns looking for jobs or employed and come home therefore once in a while, usually unexpectedly. An observation that was made was that most of these women who were users were doing it secretly, either without the husbands knowledge or if the husband or in-laws objected, they still did it. This is a very trying task for them as it automatically puts their marriage at stake in most cases.

Parity has proved to be a determining factor in many studies.(13,15,16,17). Where it has been found that there is low contraceptive prevalence in the multiparous and low parous individuals and it is high in multiparous individuals: Some studies (16,22) e.g. in Menoufia, Governorate Egypt have even gone further to show that sex preference is a determining factor apart from the parity where in most african cultures the presence of a male may determine whether or not a woman can start spacing.

This may lead to the large family size. Unfortunately the latter point was not tackled in this study. In the low parous group it is a small proportion using the services (37%, 30%, 49%) for area A, B and C respectively. This is as expected because infertility has a negative impact to contraception, so we do not expect a higher percentage than that. But it appeared that the parity in all the population with the highest contraceptive prevalence was 5 - 9 children, this went along with the question of preferable family size where more than 50% of the population were of the opinion that an ideal family size was not less than four. The world fertility survey came up with a figure of 7.2 for desired family size for Kenya which was one of the highest in the 42 nations under study. It cannot be clear from this study whether those who desired a family size of four or less were being sincere or not. Although it was a very small proportion (17%, 8.5%, 2.5% for areas A, B and C).

It appears that those who said they were not sure, by saying "any number" or "the number that God gives me" would fall in the same category as those of more than 4 children, because if somebody sincerely wanted a smaller family they would not feel drawn back to say it. But another issue that should be considered is the actual number of living children apart from the actual parity.

On the whole the question of parity and desired family size is a personalizing kind of question, difficult to assess whether or not the person replying is being sincere about the answer they are giving. So whatever is said regarding this should be treated with caution, although it gives some picture of what people feel is fair for themselves.

On religion, the area under study is mainly christian that is protestant and catholic and their closely related sects. Islamic forms a negligible number in two of the areas, Vihiga and Emuhaya and even then, they were concentrated in a few villages in one sub-location of each of those areas.

Although the catholic church has been implicated in being against the modern methods of contraception,(11,14) there was no evident difference in the areas of study. But as mentioned in the results, almost 80% of the study population was protestant with related sects.

On the whole, where studies have said that religion forbids the use of contraceptives this was not an issue that arose in this study, as even in studying the defaulters none of those interviewed mentioned religion as a reason for drop out.

Numerous studies have documented relationships among indicators of development and fertility.(14,17). Education is one of these indicators. But this should

be treated with care especially as relates to the developing world, since the magnitude of the negative association between education and fertility varies. So that when deciding on investing in education and family planning programmes, as a means to lower fertility, a nation should do this with caution.

Education represents aspirations of the individuals for themselves and their children, this is especially the case for women, because these women have high aspirations they tend to recognize the need to have limited family sizes to accomplish this goal, so that there is a tendency to have limited fertility in the more educated; (17) but unless the social environment provides alternatives for giving birth, even the educated women will tend to have a high fertility. Although other studies have come up and opposed this idea with the view that advancement in women's education will lower fertility even with no simultaneous changes in other factors (15,17) e.g. job opportunity. But all in all regardless of education, socio-economic factors existing in the community have to be considered along side the education to help people perceive the importance of scaling down their family size.

In the study population there is quite a small proportion of people with no education utilizing the services, this could be due to the setting of the

area, being rural and most people having not been exposed to the opportunities of education yet. These are mostly the older people who do not feel they need contraception. On the other hand, these are people who are negative to contraception being older.

The majority of the people were having primary education, which under most circumstances would be considered as basic education. The opportunities open to this category of Kenya in any form of employment is limited, so that most of them are involved in peasant farming and small scale businesses, so they would form the majority of the population in this kind of area under study. This could explain the high percentage in this category as seen in Table 6.

Those with more than 7 years of education, are the "elite" of that population. Most of them are more likely to be in some kind of formal employment, so they are not likely to be in the rural areas in large numbers, of the few who were there, in Saradidi and Emuhaya there seemed to be very few using the services i.e. the proportion of users was small where as in Vihiiga it was quite large. In the latter area it was observed that, this group consisted mainly of teachers and business people. The teachers in most instances it appeared were used as motivators within their clique once they were recruited as clients. In Emuhaya very few of those interviewed

appeared to be contributing to motivation of the others. The same case in Saradi di .

Overall, it seemed that of the people utilizing the services, the larger proportion had some kind of formal education and this could be attributed to their goals in life where they tend to feel they would like their offsprings to get what they tasted of education and its later benefits, therefore the need for a limited family.

But this does not necessarily mean that women of lower education have lower contraceptive prevalence than women with higher education in Kenya. The socio-economic factors co-existing in the different communities, for instance if you compare the women of the same level of education in an urban setting, it may produce a completely different picture. All the same education does appear to have some influence on the fertility pattern to some extent.

Among the drop outs the proportions were similar as in the users so education does not have an influence on the dropouts. Since it is those groups that use the drop out is in similar ratios.

6:4

Types of Contraceptives in use:

The CBD services under study give quite a large variety of contraceptives, some being more available in some areas than others depending on how the services were being run.

In Saradiidi, of the more efficient methods (19) they were providing oral contraceptives and I.U.C.Ds which were being inserted after motivation in the Rural Health Project Centre by an Enrolled Community Nurse, this was after motivation by the village health helpers who are lay educators essentially. The other types of contraceptives being provided were spermicides (foam tablets and jellies) and also condoms for the males. There was very little motivation if any by the lay educators in the line of permanent contraception (tubal sterilization and vasectomy) so that there were no clients of this category in the list of the supervisors from this area. They also ran an intergrated and FP/MCH mobile clinic and out reach programmes weekly in different areas.

In Vihiga, they were providing oral contraceptives, I.U.C.Ds, Injections, Sterilization as forms of efficient contraception. The spermicides and condoms were also available. The Vihiga programmes run mobile clinics on 3 monthly basis in strategic places in the area covered, the aim of which is mainly recruiting new

clients and for the injection, as this is the time when the Enrolled Community Nurse on the programme is available to examine, and she is responsible for giving injections. This mobile clinic also provides an advantage for some of the clients because to some degree it is Family Planning with limited MCH services. This gives the mothers an opportunity for immunization for their children and for those doing it secretly they have an excuse for going away from home in this way they can go for their resupply without the knowledge of the husband or in-laws and this solves one problem. Although in one sub-location in the division the mobile clinic had to be discontinued due to the poor turn out of clients but it was discovered later that the people actually needed the services, as few continued to pursue the services at the next nearest place which was about 15 km away, but it was the local administration that was not co-operating with the staff of the mobile clinic by creating a war-like atmosphere between the women who attended the services and their spouses. This actually should not be happening in the Kenya of today where the government is fully backing any family planning programme coming up. The Vihiga programme also has facilities for permanent contraception for males and females which is done once a week, although these

services are not free and they are about 25 km away. They charge Kshs.200 per case, but according to the socio-economic status this is flexible, if someone really needs the services, and they cannot afford to pay, as long as they have transport to Kakamega (where it is done), then it is done free of charge. It is done by a doctor through a mini-lap. Some are referred to the District Hospital in the same vicinity which is free, but the problem here is the time factor since the waiting list is long.

The resupply of the spermicides, condoms and oral contraceptives is done in the homes as in the previous area.

In Emuhaya they have the oral contraceptives, but they have no routine place for insertion of I.U.C.Ds or for injections. This has created the problem of using other health institutions in the vicinity, which are private (Maseno and Kiima) mission hospitals. There are only two Government health centres and there was one private practitioner assisting. When it came to permanent contraception again this area as in Saradiidi it was minimal. They did not even seem to be aware of where it could be done.

With all that said it can now explain why the pattern of utilization presented below, could be partly attributed to the kind of contraceptives

available in the different areas.

In Saradi di more than 60% oral contraceptives

18% I.U.C.Ds

0% Sterilization

In Vihiga more than 55% Injection

20% Oral contraceptives

0.5% Vasectomy & T.S.

In Emuhaya more than 60% Oral contraceptives

11.5% Injection

8.5% I.U.C.Ds

1.5% T.S.

But another factor contributing to popular methods is the age group of the people utilizing the method. In all areas most people were of the younger age group these are more likely to use oral contraceptives than the other methods. In Vihiga where there were quite a substantial number more than 50% (35 yrs and over) in the older age group, the injection is more popular. But where the policy regarding age has been bent in Vihiga, so that the younger women are now allowed to use the injection the women prefer the injection as most of them are using contraceptives against their husbands wishes so that once given an injection they can comfortably stay without the husband being aware of what is going on for the next three months.

With the implication that once one starts using contraceptives, they become infertile, women

who are highly parous are the ones tending to use these services especially in Vihiga area where rumours contributed to 48% of the dropouts; This could explain the high prevalence with the injection and the oral contraceptives.

Not forgetting the convenience of use of the individual methods where the spermicides are not very popular nor are the condoms. This could be attributed to the discomfort of these methods, irritation in the former and the stigma attached to use of condoms by the males.

The duration of use is largely determined by the method being used and also the reason for use apart from the other factors (17,22). For people taking oral contraceptives, it can become rather monotonous and tiring swallowing a pill everyday when one knows they are not sick. So one would expect short duration and a high drop out rate in this case, which comes out in this study (over 20% cases in each 9 months use, over 40% drop out rate). Whereas if one is on an injection, every 3 months unless one has a serious complication they are likely to continue for long. On the other hand if this complication is treated promptly, there should be no reason for discontinued use. In the case of Vihiga where there is a significant

drop in the use of this method, this may be because the complication most prevalent (excessive bleeding initially), is not attended to promptly and efficiently. As for the I.U.C.D. the chances are that somebody will stay with it for longer again unless the complications become unbearable.

In relation to availability and choice this was almost 100% in all 3 areas although in some areas like Saradi di there appeared to be some liking towards the use of injection, probably because of the convenience of duration of use so that may be it could be introduced to help those who feel they could benefit from it.

The "inefficient" methods (19) do not appear to be very popular; This could be due to a few facts, including the fact that these people are actually told by the distributors that the methods have a high failure rate. This leads to fewer people choosing them. In other words it appeared that there was direct discouragement from the lay educators on the use of these ones. And as mentioned earlier the inconvenience associated with their use e.g. the foam tablets have to be inserted before every intercourse, this can be inconveniencing to the user.

The sterilization although known in Vihiga it does appear to be very popular and one of the contributing factor was the fear for "operation". Another one was the fear that it would impair their ability to continue with their daily duties. As for the vasectomy it was implicated that it may affect the sexual activity of the man, so many were reluctant. Again in african culture the man is the deciding factor (11) and if he is against family planning there is no way one is going to convince him to have a vasectomy.

Complete analysis would require multivariate analysis which cannot be done easily without the use of computer aid.

6:5

In all the three areas it was almost invariably the choice of the client which was good. In the few cases where it was not the users priority choice, it was either due to inavailability for example in Saradi di where some would have preferred the injection and it was unavailable. There were some cases where for medical reasons, especially with the use of the hormonal contraceptives, the client was advised against the method. There was one case where the woman would have preferred Tubal Sterilization but the husband had refused to sign the consent form. On the issue of choice of method, there were three cases noticed, two in Emuhaya and one in Saradi di where the clients should not have been given the form of contraceptives they were on and yet they were on it, this is failure on the side of the deliverer of the services.

In the former, one had an enlarged thyroid gland with features of thyrotoxicosis and she was on the pill and another had varicose veins on the chest. In the former the client had varicose veins on the lower limbs. All these 3 patients were on oral contraceptives, they were advised on alternative methods and discontinued from the pills. The question here arises, before the lay educator

takes over, there is supposed to be a thorough screening examination carried out by a qualified medical personnel: if it was not carried out then it was improper or if not this is a mistake that should not be repeated. There is need to emphasize some of these issues because there are seminars and workshops for training of these trainers and they should be done appropriately.

6:6

The services have always been felt to be inaccessible and unavailable in the rural areas (2). CBD has solved this problem because they are now accessible and available, thus it is not surprising for the preference to this as compared to the facility based in all the three areas:

Area A	85%	:	15%
B	64.5%	:	35.5%
C	91.5%	:	8.5%

But in area B as can be seen it was not as high as the other two areas. This could be due to the kind of preference for a particular contraceptive. Since they prefer the injection and most of them do it secretly they do not want to have the mobile clinic too near their homes in case they are discovered. But all in all they still appreciated the idea of bringing the services to them.

6:7

These services have to be provided by distributors. The study would be incomplete without looking at the role of the distributors. In the three areas studied they are all selected under different criteria and they are all maintained differently.

In Saradi di they are selected by village health committees, on the criteria of being a married woman living in the area full time (i.e. they do not at any time have to go out to live in town or another area) usually they are christians. They basically work voluntarily but when they work at the rural health project which is may be once in two months, they are given a small token. They have peer motivators who assist them and these are purely voluntary.

In Vihiga these are one man and women who applied for the posts when advertised in 1978 and have been working as FPAK employees since then. They are on a monthly pay which is very minimal Kshs.400/= but it does not arrive monthly always, usually it is delayed and even then it is only a small token. One cannot really consider it as pay, when these women, although they are meant to work part time, work the whole day often covering long distances on foot.

In Emuhaya these are women belonging to women groups and are chosen by their groups to represent them. These women work purely on voluntary basis: The only criteria here seems to be, they belong to a women group: They are supposed to work part-time i.e. only a few hours a day.

In all the three areas most of the distributors come from poor homes where they are the sole supporters of the family mainly, due to existing social problems e.g. some are widows, jobless husbands, etc.

They all have the duty of motivating people, following up clients and dropouts and running mobile clinics where they exist. (Saradi di and Vi higa).

They leave their children and homes unattended to: The question is how long are they willing to continue like this? What can be done to help? If the CBD programme has to continue, it cannot continue without the distributors. This study tried to touch on this issue, though not too deeply in trying to find out what the clients felt about the distributors in terms of the services they provide.

In more than 60% in all the three areas it was felt that they played a useful role. A negligible proportion felt they were not useful and could do without them.

On a question of the users taking this as their own programme and maintaining the distributors in terms of paying them it was a different picture. In Saradi di and Vihiga 40% and 20% respectively were willing to contribute and yet 58% and 60% felt they need to be paid but by somebody else. So that in total 98% and 80% felt they should be paid. This could be attributed to the fact that when these programmes were started, the agencies running them were giving the lay educators a token, the people do not really feel it is their responsibility but the government or other bodies. Compared with Emuhaya the response was more positive 86% felt they should be paid and 61.5% were actually willing to contribute towards their up-keep. This is an example of a voluntary programme that people feel it is theirs. But the next question arises would they actually do it when it came to doing it? This is yet to be found out.

Discussions with the distributors themselves revealed that they feel they should be paid, but most feel if that is the case, they should be doing more than just dealing with contraceptives. Especially in Vihiga it was felt that it is meaningless to go to a home to resupply condoms and yet when there is a child with a simple ailment like malaria

or diarrhoea or a small burn you tell the mother to take to the nearest dispensary. Or resupply oral contraceptives and the client has dysmenorrhoea and she is referred to the nearest health centre for panadol. So it was suggested that they felt they should have more courses or seminars organised with emphasis on complications and management of the contraceptives they provide and also basic first aid. After that then they should be given a basic first aid kit with analgesics and some basic drugs like chloroquin, g.v., cotton wool. They also felt since they resupply pills in the homes they need to know how to use B.P. machines and be provided with a few at least for use within the sub-locations.

In all the three areas, there was a general feeling that they are too few covering a wide area and felt they needed to be a few more, and also so that if one is away on a journey, there is somebody else the clients could go to.

6:8

On the drop outs, most of the contributory factors have been discussed. It is noticed that out of the defaulters at least half (56%, 58%, 77%) would like to try again. Maybe if some of the points just mentioned could be taken into consideration, we could have fewer drop outs than before through the CBD programme.

6:9

The major objective of this study was to measure the effectiveness of the CBD programmes and also to measure the acceptance of this strategy. Given the sampling design used in this study, due to the time factor and financial constraints, it was not possible to assess one of the specific objectives, the drop out rate. This resulted in not being able to determine the user rate and therefore the aim of using defaulter rate versus user rate from the beginning of the programme as a measure of the effectiveness of the programme was not possible. Probably the use of a better design where for every user a drop out would be interviewed a defaulter rate could have been arrived at and used in relation to user rate to measure the effectiveness of the programme and also measure the acceptance of the strategy. This could still be done at a later stage and should be done.

In all what has been done is fulfilling the other objectives of the study to give a general picture of the efficiency and deficiency of these programmes and therefore give recommendations as need may be.

CHAPTER 7

Conclusion and Recommendations

7:1

In summary the 3 areas under study have almost similar characteristics, differing mainly where it has been mentioned. Some make the programmes weaker than the others and others make one programme stronger: An example of the former is in the Emuhaya area where women group leaders are used, there is some kind of barrier created age wise and in relation to sex (M:F = 1:12), so that this could be a contributory factor to low utilization in the young age group, also in male utilization so that if you compare it with Saradi di, where there are male peer motivators and some of the distributors are young there is a higher % of users in males (M:F = 1:7) and in the younger age group.

An example of a strong point is the use of mobile clinics in the Vihi ga and Saradi di areas. The provision of Family Planning alongside limited MCH services produces some form of motivation.

The people in this case see that there is a concern for the welfare of the children being produced and may be better induced to try and contribute to this well being, so that family planning is not being treated in isolation.

Another important fact is that family planning is part of health. Health among the people cannot be considered in isolation in relation to development of a nation. Other factors must be taken into consideration, and be part of the continued education being provided, for better socio-economic status and therefore development. These other fields include, Agriculture and therefore nutrition which is related to breastfeeding, formal education, job opportunities, water and sanitation and the list is endless, not forgetting retaining some cultural values attached to living.

In the long run, family planning means having the number of children, within the time period that one can afford to take care of them, to improve the welfare of the children as well as the parents (21). For this to occur, all these factors must be considered.

7:2

Recommendations:

1. When programmes of this nature are set up, they should be in co-ordination with the Government, so that when the need arises the Government can assist where possible e.g. drugs, equipment, and even personnel. But in doing so the people should be made more responsible in the running of the programme so that they maintain it as their own as far as possible. This should be in the form of providing manpower.
2. The use of mobile clinics, which should be intergrated with limited MCH services (immunization, basic curative services), should be encouraged in these kind of services. But care should be taken not to fail once they are started otherwise it might lead to discouragement.
3. There should be made available the maximum number of types of contraceptives to give people a wider choice in every CBD programme set up.
4. More seminars and workshops should be organised to bring together the lay educators from different districts to share experiences and exchange views for a wider scope. Along side with this there should be provision of basic equipment such as B.P. machines and basic drugs for common ailments such as colds, malaria, first aid for burns trauma and so on.

5. Females who wish to have sterilization should be allowed without consent of husband where necessary. Because in the long run it is the female who bears the risks and burden ahead.
6. A follow-up study should be done on the attitude of leaders, older generation and males towards contraceptive use in relation to family planning and an intervention programme designed to try and change this to the positive side; as it was noticed that these people have a great influence on what goes on in all the three areas and most of these have a negative attitude to the programme.

R E F E R E N C E S

1. Government Printers

"Kenya National Development Plan 1974/78"

2. Central Bureau of Statistics

"Kenya Fertility Survey 1977/78"

3. Central Bureau of Statistics

"Kenya Population Census 1979"

"Kenya Population Census 1969"

4. Gary Bergthold (Dr.)

"A field study and recommendation for
expansion of Community Based Distribution
of Family Planning Contraceptives in Kenya"
1984

5. Keyonzo A.

A preliminary review of Community Based
Distribution of Family Planning Contraceptives
in rural Kenya
July 1984

6. Ministry of Health and Pathfinder Fund

"First National Community Based
Distribution of Contraceptives/Health
Services Workshop"
November 1984

7. Panken J.P.
"Organisation Framework for Primary Health Care"
August 1984
8. Kaseje D.C.O.
"The Saradi di Rural Health Project: The impact of Community Based Distribution of Contraceptive Methods on Utilization of Family Planning Services and factors affecting the utilization"
September 1984
9. Bennett F.J.
"Primary Health Care and Developing Countries"
Soc. Sci. and Med. Vol. 13A, pg 505-514
10. Wilms D.G. (Unpublished Dissertation)
University of British Columbia, Dept. of Anthropology and Sociology
"Epidemiological Prevalence in Community Based Health Care Programmes in Kenya"
April 1984
11. Personal Communication with some women group leaders in the Rift Valley Province.

12. Population Crisis Committee: "Issues in
Contraceptive development"
Population Reports
May 1985
13. Population Information Program:
"After Contraception. Dispelling rumours
about later childbearing"
Population reports Series J No. 28
14. Population Information Programme:
"The impact of family planning programmes
on fertility"
Population reports Series J No. 29
15. Eulalio G. Maturar: Population, Health and
Family Planning Studies in Family Planning
Vol. 10, 6/7
June/July 1979
16. Saad Gadalla, James Mi Carthy & Oona Campbell:
"How the No. of living Sous influences
Contraceptive use in Menoufia Governorate
Egypt"
Studies in Family Planning Vol. 15, 4
July/August 1984
17. John E. Laing:
"Continuation and Effectiveness of
Contraceptive Practice". Across
Sectional Approach Vol. 16, 3
May/June 1985

18. Population information programme:

"Community Based Health and Family Planning"
Population reports Series L 3

19. World Fertility Survey Report (London 1981)

20. Ominde Simeon - The Population of Kenya, Tanzania
and Uganda 1975

21. Jakarta Statement

"Family Planning in the 1980 - A Global
Responsibility to meet people's need"

The statement was issued by the International
Conference on Family Planning in the 1980s,
held in Jakarta, Indonesia, April 26-30, 1981.

Attended by experts and officials from 90
Countries, sponsored by U.N. Fund for
Population Activities, IPPF and the
Population Council.

22. Population Information Programme:

"Contraceptive Prevalence Surveys"
Series M No. 5,
May/June 1981