

FACTORS ASSOCIATED WITH CLIENTS' SATISFACTION WITH
FAMILY PLANNING SERVICES:

A CASE STUDY OF SOME FAMILY PLANNING CLINICS IN NAIROBI

BY

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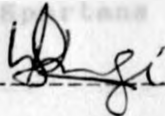
A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR
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1990

DECLARATION

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

Signature



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Signature



DR. KHASIANI, S.A.

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DR. MUGANZI, Z.

DEDICATION

To Chege, Kariuki, Wangui and Mwangi, for persevering when the going was tough. You are real Spartans

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This thesis is a manifestation of collaborative efforts of various people. I take this opportunity to acknowledge the contributions of a few of them.

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Finally, my sincere gratitude and deepest appreciation goes to all who contributed towards the completion of this work. To them all, I say,

AHSANTE SANA

ABSTRACT

The study is divided into five chapters. The first chapter deals with the general introduction, chapter two with the literature review. Chapter three discusses the methodology of data collection and analysis. Chapter four presents the results of the analysis, and the interpretation, Chapter five gives a summary, conclusions, recommendations pertinent to policy making and recommendations for further research.

In this study, an attempt is made to examine factors associated with clients' satisfaction with Family Planning Services in Nairobi. These factors are grouped into three categories: namely, accessibility (travelling time and cost); clinic-based (waiting time, motivation, staff/client interaction, availability of preferred method, clinic type); and client factors (clients' health after adoption of contraception).

The main objective of the study was to examine accessibility, clinic-based and client factors associated with Family Planning Services in Nairobi.

The independent variables studied included travelling time and cost, waiting time, motivation, staff/client interaction, availability of preferred method, clinic type and client's health after adoption of contraception. The dependent variable was clients' satisfaction with Family Planning Services.

One characteristic of most contraceptive studies was that most of them are focused on the background factors of clients. The study used primary data collected from a field survey as the basic source of data. A structured questionnaire was administered to 368 clients under study. The data was analyzed using descriptive statistics and the chi-square (χ^2) test to determine the association between the independent and dependent variables.

The findings revealed that travelling time and client's health after adoption of contraception are not significantly associated with clients' satisfaction with Family Planning Services. Travelling cost has a weak association. However, waiting time, motivation, staff/client interaction, availability of preferred method and clinic type are significantly associated with clients' satisfaction with Family Planning Services.

The study concludes that the small number of clients who are satisfied (30.2 per cent) as opposed to the dissatisfied (69.8 per cent) have continued using Family Planning Services due to the more pressing need to space, limit or stop child-bearing which supercedes satisfaction with the services.

The main recommendations that arise from this study are that waiting time at the clinics be reduced through efficient client flow with establishment of definite entry and exit points at the clinics, and a similar study at national level be carried out giving details of reasons for the low satisfaction level as was done in this study.

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CHAPTER ONE

GENERAL INTRODUCTION

1.0.0. INTRODUCTION

Kenya had an early start in Family Planning activities, but current contraceptive use level among all women is still low. The level was 15.0 per cent in 1984 and 23.2 per cent in 1989 (Kenya Contraceptive Prevalence Survey, (KCPS), 1984, Kenya Demographic and Health Survey, (KDHS), 1989). Nairobi like the rest of the country generally has a low use level of contraceptives of 27.9 per cent (KDHS, 1989) although it is the origin and focus of contraceptive activities in Kenya (Rogo, 1988). This study aims at examining the factors associated with clients' satisfaction with Family Planning Services in Nairobi.

The first Family Planning Clinic in Kenya was opened in Nairobi in 1956 with the diaphragm as the only contraception offered. It specifically catered for the needs of non-African Population although a few Africans sought these services (The Standard, April 10, 1990 p. 13).

Today, there are many sources of Family Planning Services in Nairobi which include, hospitals, clinics, pharmacies and Private Doctors (Rogo, 1988). Government Hospitals and clinics offer

services to about 58 per cent of all the users. The second most important agency in the provision of Family Planning Services is the Family Planning Association of Kenya (FPAK) (KCPS, 1984). Family Planning Services are provided through Maternal-Child Health and Family Planning Program (MCH and FPP) of the Ministry of Health. (See distribution of Family Planning Clinics in Nairobi, Fig.3)

In Nairobi, Family Planning clinics are distributed as shown in Table 1.1 below, its details are given in Appendix II.

TABLE 1.1: FAMILY PLANNING CLINICS BY MANAGEMENT IN NAIROBI

<u>MANAGEMENT</u>	<u>NO. OF CLINICS</u>
1. Government	18
2. Nairobi City Commission	49
3. Private Doctors	86
4. Non-Governmental Organization (NGO)	04
5. Companies	04
6. Mission	04
7. University of Nairobi	01

TOTAL	166

Source: Nairobi, Provincial Population Report, 1989

Family Planning clients use modern methods of contraception which include:- Intra-Uterine Device (IUD), abortion, sterilization, oral contraceptives, injections, condoms, jellies and the diaphragm.

Family Planning Services are clinic-based where different types of modern contraceptives are offered. However, the clinic sessions are not efficient. Clients are not served in a systematic order. The waiting rooms are crowded and the average waiting time for all the clients is increased (Rogo, 1988).

This decreases the efficient use of clinic staff, who are overstressed and feel rushed because of the large number of waiting clients. There is also an imbalance between the clients' service requirements and the number of staff stationed in the clinic. As a result the quality of services is poor and the clients are dissatisfied, yet clients' satisfaction is a vital determinant of contraceptive use (Bruce 1989).

This study has examined the accessibility, clinic-based and other factors which affect clients' satisfaction with Family Planning Services in Nairobi.

1.0.1 STATEMENT OF THE PROBLEM

This study is clinic-based, and examines the factors associated with clients' satisfaction with Family Planning Services in Nairobi. The factors that the study has measured are travelling time and cost, availability of preferred method, staff/client interaction, motivation, clinic type and clients' health after adoption of contraception.

Although Family Planning activities in Kenya and in Nairobi have officially been promoted for about three decades, the level of contraceptive use in the city is still low (Ikamari, 1985; Ominde, 1988). The proportion of fecund women who are not protected from the risk of pregnancy is still high. According to KCPS (1984 p. 101), 12.5% of all women aged 15-49 in Nairobi were at the risk of unplanned pregnancies.

In 1979, there were 348,327 females in Nairobi. Of this total, 41% were less than 15 years, while 189,988 (54%) were aged 15-49 years (National Census Report 1979). This high proportion of women in their reproductive years is however not matched by a high contraceptive use in Nairobi. For example, in 1984, only 22.9% of all currently married women were using any modern Family Planning method (KCPS, 1984, p.89). In 1989, this had

risen to only 27.9% (KDHS, 1989 p.35). There is also a high discontinuation rate among the Family Planning users (Ojaka, 1986).

This suggests the need to examine the factors associated with clients' satisfaction with Family Planning Services in Nairobi among the married and unmarried women who are in the reproductive ages 15-49 and are currently clients in Family Planning Clinics.

1.0.2 OBJECTIVES

The objectives of this study are:-

GENERAL OBJECTIVE

To examine the accessibility, clinic-based and client's factors associated with clients' satisfaction with Family Planning Services.

SPECIFIC OBJECTIVES

1. To determine the level of satisfaction of clients with Family Planning Services in Nairobi.

To examine the association between travelling time and cost to Family Planning clinics and clients' satisfaction with Family Planning Services.

To determine the waiting time in Family Planning clinics and its association with clients' satisfaction with Family Planning Services.

To determine the association between motivation given to clients and clients' satisfaction with Family Planning Services.

To examine the association between staff/client interaction and clients' satisfaction with Family Planning Services.

To investigate on the association between availability of preferred method of contraception and clients' satisfaction with Family Planning Services.

To determine the association between client's health after adoption of contraception and clients' satisfaction with Family Planning Services.

1.0.3 JUSTIFICATION FOR THE STUDY

The research problem is justified on the ground that factors associated with clients' satisfaction with Family Planning Services have not been satisfactorily investigated in the context of accessibility, clinic-based and client factors in Kenya. Many studies have examined ever-users and their background characteristics. The most popular studies are those based on women in rural and urban areas. It is also clear that most previous studies approached contraceptive use problem from marital perspective, but contraceptive use by single women is generally ignored. This study has covered both married and unmarried women. Few studies have focused on current-users using a clinic-based approach although the adoption of Family Planning Program started as clinic-based (KCPS, 1984, p.93) which briefly reviewed the indicators of user satisfaction. Yet reviewed literature shows that accessibility, clinic-based and client factors affect clients' satisfaction with Family Planning Services in a number of countries. This study has therefore extended on previous studies by considering the factors that are associated with clients' satisfaction with Family Planning Services.

Nairobi was selected as the study area because it fulfilled several criteria, for example, it has a high clientele. From

research view point, Nairobi has caught the interest of a number of Family Planning researchers which is an asset to the present study, because although their works are mainly focused on background factors of clients, they give the possibility to register what demographic changes have occurred in Nairobi. From Family Planning Service delivery view point, Nairobi is fairly well equipped with Family Planning facilities especially in clinics compared with other parts of the country (Rogo, 1988), yet there is low contraceptive use and high discontinuation rates because clients are dissatisfied with the services.

There is need for a deeper analysis and reassessment of the contraceptive situation in Nairobi as provided for in this study. This will add onto the existing demographic knowledge using the city of Nairobi as a unit of analysis.

The study will help in assessing the clinics' performance and improving their efficiency in general operations because the causes and remedies of operation problems will be identified.

The findings in this study can be used in counselling Family Planning adopters by the clinic personnel. They can also help in enhancing factors associated with clients' satisfaction with Family Planning Services and in formulating appropriate

policies, programmes and strategies regarding population goals and targets.

On the whole, it is hoped that this study will provide additional information to what is already known about clients' satisfaction with Family Planning Services. Such information can be used for comparative and other academic purposes.

1.0.4 SCOPE AND LIMITATIONS

(i) SCOPE

This study is focused on the current contraceptive users who attend Family Planning Clinics in Nairobi and are not pregnant, but believe themselves physiologically capable of having children. This means that they would be exposed to the risk of conception in absence of contraception.

Previously, single women have been excluded from most studies on contraceptive use. Sexual activities are not confined to ever-married women, but a large number of single women are also sexually active (Rogo, 1988). This study has consequently included both married and unmarried women in the reproductive ages. The study has excluded men who attend Family Planning

Clinics because generally, the clinics are seen as "women's clinics" since they form the bulk of the clientele who visit them (Rogo 1988). All discontinuers were left out. Some of them may have conceived while using a method and could have been genuinely dissatisfied. However, this was not a Longitudinal Study.

Factors that are associated with clients' satisfaction with Family Planning Services such as, travelling time and cost, waiting time, motivation, availability of preferred method, staff/client interaction and clients' health after adoption of contraception were chosen for analysis and measurement because they have a very important bearing on the present study.

(ii) LIMITATIONS

The present study is by no means devoid of shortcomings. It is focused on Family Planning clients who are in the reproductive ages and therefore exposed to the risk of pregnancy. However, women who have undergone tubal ligation for contraceptive purposes were considered as fertile current users. Their inclusion in this study was based on the assumption that female sterilization is one of the modern contraceptive methods which are examined in this study. But the researcher is aware that some of them might have been sterile even in absence of tubal

ligation and would therefore not have considered themselves as fertile.

Coupled with these are those women who have used contraceptives for too long and cannot with certainty know whether they are still capable of having a child. However, they were still considered as fertile.

The study has also included women who have been using contraceptives, but also abstaining from sexual intercourse for non-contraceptive reasons such as reduced sexual interest, or separation of spouses when one migrates elsewhere. Such women have no risk of conception even in the absence of contraception but they too were considered as fertile and exposed to the risk of conception.

Limited resources and time restricted the number of respondents interviewed in this study. A total of 368 clients were interviewed, as opposed to the intended 418.

The study is based on a model drawn and analyzed by Judith Bruce (1989) on "The Quality of Service Experience. Its Origin and Impact." From the model selected variables were analysed. Other variables adopted were lacking in the framework. These are waiting time, travelling time and cost.

With more finance and time, it would have been more appropriate to carry out the research in more Family Planning Clinics in Nairobi. Rural clinics would also have been incorporated for comparative purposes.

1.0.5 BACKGROUND TO THE STUDY AREA

1. GEOGRAPHICAL SETTING

The study was carried out in Nairobi which occupies an almost Central Position in Kenya (Figure 1). This encourages high immigration especially by women in their productive and reproductive years who are potential clients of Family Planning Clinics.

Nairobi is the capital city of Kenya which dominates in urban hierarchy and employment generation (Obudho and Muganzi 1987). This partly explains why there are many family planning clinics and high contraceptive use in comparison to other towns in Kenya.

The city is also a hub of communication where roads, railways and air-route converge and run-out to all parts of the country, Africa and to other continents. Good communication in the city ensures quick and easy transportation to Family Planning

Clinics. This reduces travelling-time except during "rush-hours" when traffic is slowed down.

2. HISTORICAL BACKGROUND

In colonial Kenya, women were not allowed to live in urban areas. Cultural traditions also restrained female movements. Therefore, men dominated in migration (Ominde, 1977). Due to the small female population in Nairobi, the demand for contraceptives was also small.

The first Family Planning Clinic in Kenya was opened in Nairobi in 1956 with the diaphragm as the only contraception offered. This clinic mostly offered Family Planning Services to foreigners. A few Africans sought these services (Standard, Tuesday, April 10, 1990 p.13). Another clinic was later opened in Mombasa, and the two clinics merged to form the first nuclear Family Planning Association in Kenya.

Today, many agencies dealing with Family Planning have their headquarters in Nairobi, where they hold conferences, seminars and short courses on Family Planning issues. They also financially assist Family Planning activities. These bodies

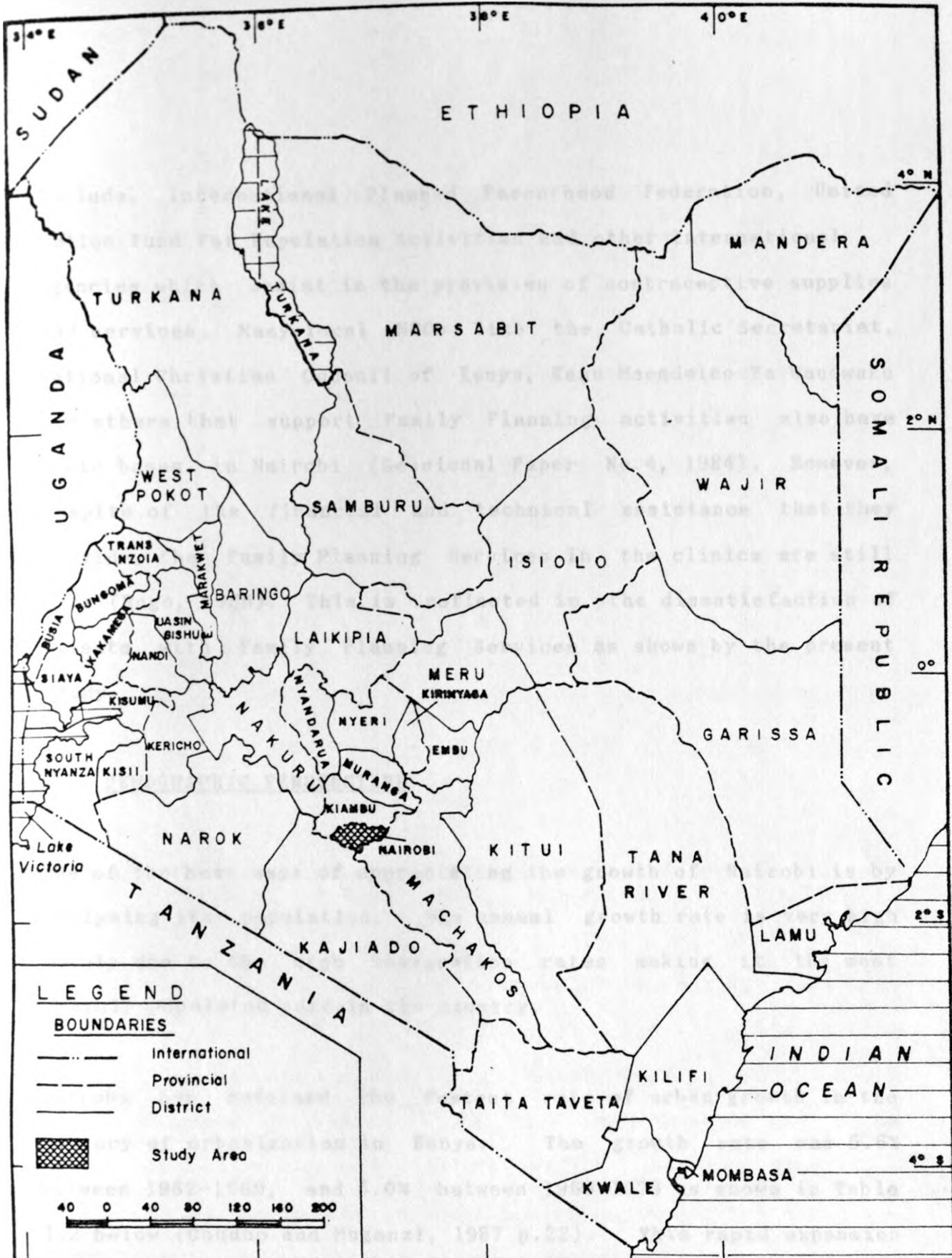


Fig. 1 : KENYA : NAIROBI PROVINCE
 SOURCE: Fertility Levels and Trends in Nairobi (Mukoma, T.A. 1990)

include, International Planned Parenthood Federation, United Nation Fund For Population Activities and other International Agencies which assist in the provision of contraceptive supplies and services. Many local NGOs like the Catholic Secretariat, National Christian Council of Kenya, Kanu Maendeleo Ya Wanawake and others that support Family Planning activities also have their bases in Nairobi (Sessional Paper No.4, 1984). However, inspite of the financial and technical assistance that they provide, the Family Planning Services in the clinics are still poor (Rogo, 1988). This is reflected in the dissatisfaction of clients with Family Planning Services as shown by the present study.

3. DEMOGRAPHIC PERSPECTIVE

One of the best ways of appreciating the growth of Nairobi is by analysing its population. The annual growth rate is very high mainly due to the high immigration rates making it the most densely populated part in the country.

Nairobi has retained the fastest rate of urban growth in the history of urbanization in Kenya. The growth rate was 5.6% between 1962-1969, and 5.0% between 1969-1979 as shown in Table 1.2 below (Obudho and Muganzi, 1987 p.22). This rapid expansion of the city is concurrent with the rapid increase in the number

of women in the reproduction years. In 1969, females aged 15-49 were 107,874 as compared to 189,970 in 1979, an increase of 76% (Census Reports, 1969, 1979).

TABLE 1.2: THE POPULATION OF NAIROBI AND ITS GROWTH RATES

<u>YEAR</u>	<u>POPULATION SIZE</u>	<u>POPULATION GROWTH RATES</u>
	('000)	(%)
1962	344	5.6
1969	509	4.8
1977	776	5.3
1979	863	5.0
1980	913	-

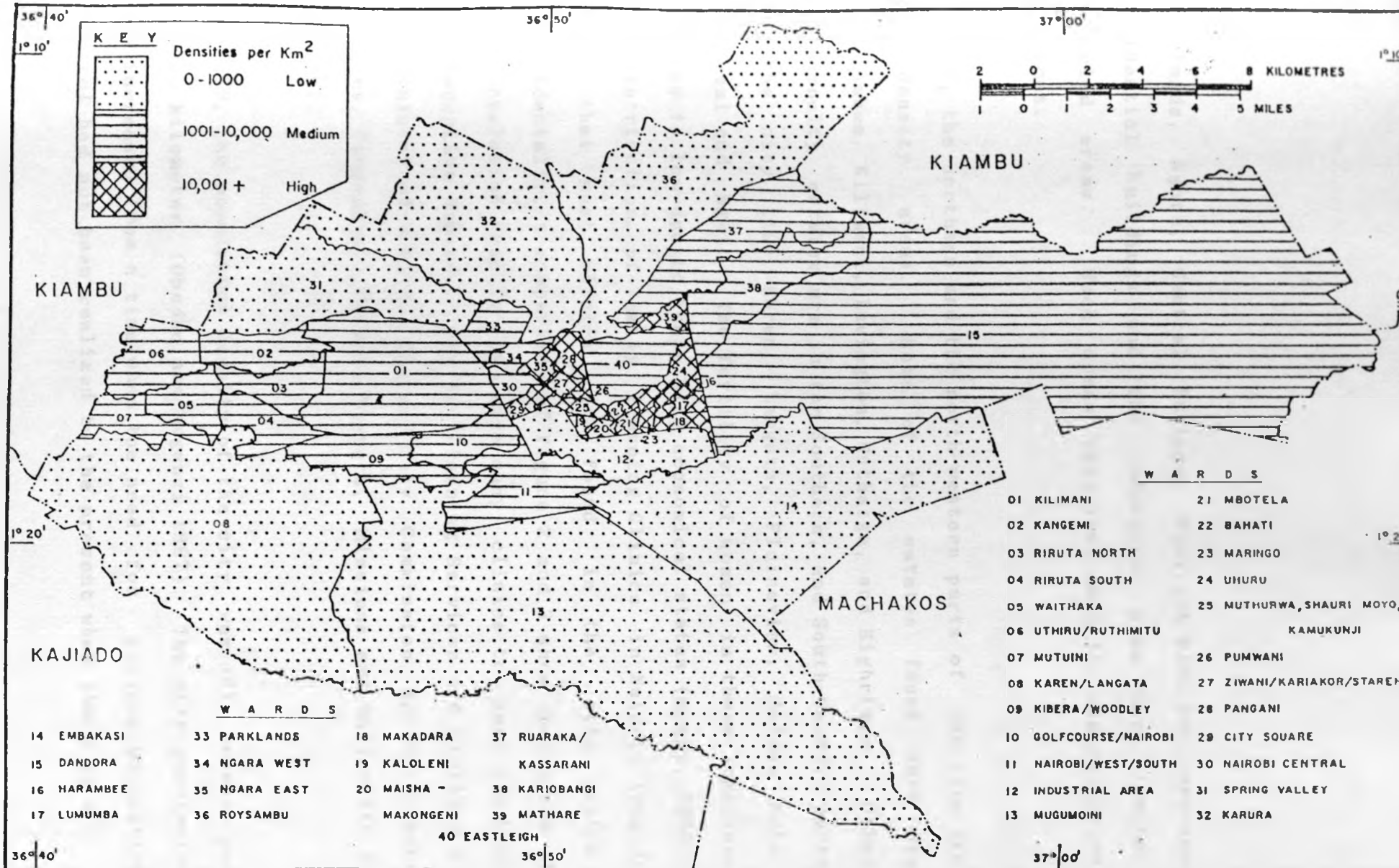
Source: Central Bureau of Statistics, Ministry of Economic Planning and Development, 1962 - 1980

Nairobi also has the highest urban population ranging from 54%, 56.9% and 53% in 1962, 1969 and 1979 respectively. This implies a high degree of primacy in Kenya (Opinya, 1982, p.6). Therefore, one may deduce that the factors which led to the city's monopolistic growth still prevail. However, population growth is not matched by an equally high contraceptive use. The current use of modern Family Planning methods was only 22.9% in

1984. Although, it was the highest in the country, it is low by metropolitan standards (KCPS, 1984, p.89). In 1989, the current use level in Nairobi was 27.9% (KDHS, 1989).

The population of Nairobi is dominated by men, which implies a high sex imbalance. In 1969 and 1979, the sex ratio was 154, and 138 respectively (Census reports, 1969, 1979). Although sex ratio among age categories in 1979 showed a trend towards a balance, the imbalance still exists. However, the demand for contraceptives is higher.

The population of Nairobi is not evenly distributed, but has varying density areas. The Eastlands are the most densely populated parts. The bulk of residents here are low income people. In 1963, one half of the city residents lived there (Masaviru, 1981). The uncontrolled Mathare settlement has a density of 200-1250 persons per square hectare (Figure 2). There is a close concentration of housing estates such as Ofafa Jericho, Lumumba, Makadara, Buruburu, Umoja, Kayole, Dandora and Kariobangi. Other high density areas are Kibera, Kawangware and Kangemi. In such areas, the need for contraceptives is high, thus Family Planning Clinics have sprang up there.



KEY

Densities per Km²

[Dotted pattern]	0-1000	Low
[Horizontal lines]	1001-10,000	Medium
[Cross-hatch pattern]	10,001 +	High



KIAMBU

KIAMBU

KAJIADO

MACHAKOS

W A R D S				W A R D S	
14 EMBAKASI	33 PARKLANDS	18 MAKADARA	37 RUARAKA / KASSARANI	01 KILIMANI	21 MBOTELA
15 DANDORA	34 NGARA WEST	19 KALOLENI	38 KARIOBANGI	02 KANGEMI	22 BAHATI
16 HARAMBEE	35 NGARA EAST	20 MAISHA - MAKONGENI	39 MATHARE	03 RIRUTA NORTH	23 MARINGO
17 LUMUMBA	36 ROYSAMBU	40 EASTLEIGH		04 RIRUTA SOUTH	24 UHURU
				05 WAITHAKA	25 MUTHURWA, SHAURI MOYO, KAMUKUNJI
				06 UTHIRU/RUTHIMITU	26 PUMWANI
				07 MUTUINI	27 ZIWANI/KARIAKOR/STAREHE
				08 KAREN/LANGATA	28 PANGANI
				09 KIBERA/WOODLEY	29 CITY SQUARE
				10 GOLFCOURSE/NAIROBI	30 NAIROBI CENTRAL
				11 NAIROBI/WEST/SOUTH	31 SPRING VALLEY
				12 INDUSTRIAL AREA	32 KARURA
				13 MUGUMOINI	

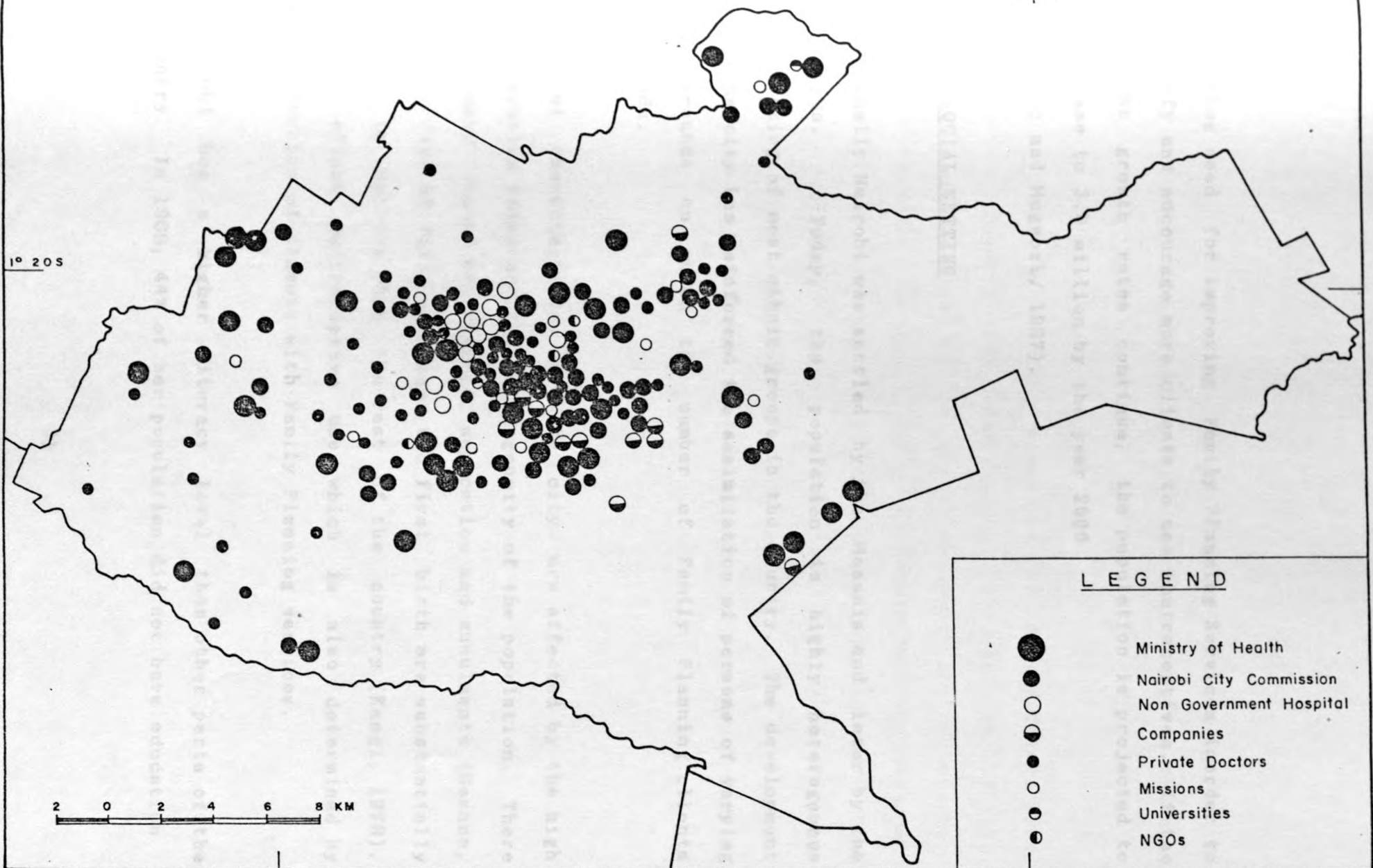
Fig.2 : NAIROBI:POPULATION DENSITIES (1979 CENSUS)

SOURCE : Census Report, Ministry of Finance and Planning, Statistics Division, Government Printers, Nairobi, Kenya, 1979.

Parklands, Ngara, Central Business District with business-cum residential buildings and the industrial area have limited occupied areas. Such areas have less need for contraceptive services.

Mostly, the northern and the north-western parts of the city are low density areas. Some of the estates found here are Kileleshwa, Kilimani, Lavington, Muthaiga, and Highridge. Other low density estates are in the Southern, and South-Eastern parts of the city like Karen, Langata, Plainsview, Golden Gate, Embakasi and Ngei. The fertility of women in these luxurious estates is low due to their high economical status (Kangi, 1978). The distribution of Family Planning Clinics in Nairobi (Fig.3) shows that most clinics are found in the city centre. Coincidentally, a comparison of Figure 2 and 3 show that areas of high population density also have many clinics to meet the high contraceptive demand. Family Planning Services are provided by the Ministry of Health, Nairobi City Commission, Non-Government Clinics, Companies, Private Doctors, Missions and University of Nairobi.

In 1969, the population density of the city was 147 persons per square kilometer (Obudho and Muganzi 1987). The city population has increased from a time when the need for serious population control had not been realized to the present when there is a



LEGEND

- Ministry of Health
- Nairobi City Commission
- Non Government Hospital
- ◐ Companies
- Private Doctors
- Missions
- Universities
- NGOs

2 0 2 4 6 8 KM

Fig. 3 : DISTRIBUTION OF FAMILY PLANNING CLINICS IN NAIROBI BY MANAGEMENT

pressing need for improving Family Planning Services in order to satisfy and encourage more clients to use contraceptives. If the present growth rates continue, the population is projected to increase to 3.0 million by the year 2000

(Obudho and Muganzi, 1987).

4. SOCIAL SETTING

Originally Nairobi was settled by the Maasais and later by the Kikuyus. Today, the population is highly heterogeneous consisting of most ethnic groups in the country. The development of the city has reinforced the assimilation of persons of varying backgrounds on which the number of Family Planning clients depends.

Marital characteristics of the city are affected by the high immigration rates and the heterogeneity of the population. There are many cases of divorce, separation and annulments (Gesane, 1985). Age at first marriage and first birth are substantially higher in Nairobi than the rest of the country (Kangi, 1978). These affect contraceptive use which is also determined by satisfaction of clients with Family Planning services.

Nairobi has a higher literacy level than other parts of the country. In 1969, 44% of her population did not have education

(Gesane, 1985). Education directly influences contraceptive use (Ikamari, 1985), and the number of clients in Family Planning Clinics.

Today, the number of educated women in Nairobi has increased. Many have joined formal sector jobs, but inspite of this, contraceptive use level is low, due to the poor services provided in the clinics (Ikamari, 1985). Consequently, many women are involved in illegal abortions and child abandonment. Such children develop into "social misfits" like "parking boys", thugs and other anti-social people (The Standard, April 10, 1990).

CHAPTER TWO

LITERATURE REVIEW

2.0.0 INTRODUCTION

In this chapter, an attempt has been made to discuss the relevant literature on the association between selected variables and clients' satisfaction with Family Planning Services. Studies by different scholars from both developed and developing countries are reviewed. However, very few studies from developing countries have focused on clients' satisfaction with Family Planning Services. The theoretical Framework, conceptual model, hypotheses and variables are also given.

2.0.1 LITERATURE REVIEW

TRAVELLING TIME AND CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

Time spent in travel to clinics helps to show how accessible the facility is to clients. This influences the utilization of contraceptive supplies and services. This was confirmed by Maine (1981) in a study of the United States of America's

clinics. But in this study, this will be shown in relation to clients' satisfaction with Family Planning Services.

In their study on a sample of 1915 women aged 15-44 interviewed in Guatemala National Survey of 1979, Chen et. al. (1983) found that the long time used in travel to clinics discourages many potential Family Planning clients. This is supported through a study by the U.S.A. Population Institute (1984, p.53) which showed that accessibility to Family Planning clinics, which is partly measured by travelling time affects clients satisfaction with Family Planning Services. This study was urban-based and great accessibility to Family Planning Services was found.

Porter (1984) found that in the Republic of Dominica, travelling time to Family Planning supplies and services affected clients' satisfaction and continuity with contraception. Continuity was not examined in this study, but travelling time was analysed.

Likewise, in studies carried out in Eastern Asia on travel time to the source of Family Planning Services travel time was found to be an important determinant of clients' satisfaction with such services. Use was highest among women who travelled less than 15 minutes and decreased progressively at an increased rate for those who travelled furthest especially if travel time was less than 60 minutes (Peng et al, 1981).

Novak et al, (1983) in a comparative study involving five developing countries namely, Costa, Rica, Colombia, Thailand, Nepal and Honduras found that except for Thailand, travel time to source of contraceptive supplies and services was a very important determinant of contraceptive use. It was highest among exposed women who travelled less than 15 minutes, decreased slightly for those whose travel was between 15 and 60 minutes, then declined at an increased rate for those furthest away.

Travel time to Family Planning clinics depends on the distance and mode of transportation. This was found by the World Population Council (1984) in a study carried out in Rural Thailand. Distance to the Family Planning outlets decreases with the construction of new facilities as does travel time. The latter is also reduced by improved transportation. In this study, distance to the clinics was not considered but the mode of transportation was.

In their study among rural women in Kenya, Dow and Werner, (1980/81) observed that proximity to a source of contraceptive service critically affects clients' satisfaction with Family Planning Services. Women near the sources (31.7%) were significantly more likely to have visited the facility than those who lacked access (18.2%) and travelled for long distances thereby spending a lot of time.

Dow (1981) found that to obtain a method, women required 1.92 hours in Travel, while 1.82 hours was spent at the clinic and a further 1.92 hours for the return journey. Isolation of Family Planning facilities was found to be a major obstacle to contraceptive use because clients are dissatisfied to seek such services. Accordingly, proximity to the clinic affects use because a considerable expenditure of time discourages regular contraceptive use.

The findings of KFS (1977/78) and KCPS (1984) support this further. Most Family Planning clients in KCPS take less than 30 minutes to travel to Family Planning clinics. Long travelling time to those facilities dissatisfied them. This reflects the inadequacies of facilities. These studies which were nation-wide and cross-sectional differ from the present one which has concentrated on an urban area where travelling time to Family Planning clinics is usually shorter. In KDHS, 45% of the women were found to have spent 30-60 minutes to travel to the clinics while 31% of the women spend 15-30 minutes.

TRAVELLING COST AND CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

The expenses incurred in travel to Family Planning clinic and travelling time are related, and both depend on distance.

(Maine, 1981) Chen et al, (1983) argues that lack of reliable transportation to and from Family Planning clinics coupled with high transportation cost discourages many Family Planning clients. In the present study reliability of transportation was not studied except the transportation mode.

Travelling cost also determines the category of women who use contraceptives. Only those who can afford high travelling costs visit the clinics far way from their residences. Women in lower income groups find it prohibitive to pay much in travel to the clinics as was found in studies carried out in Sri Lanka (Immerwahr, 1981). This was also considered in this study.

In Kenya, similar findings have demonstrated an association between travel cost and clients' satisfaction with Family Planning Services. The KFS 1977/78 found that women who paid less to travel to the clinics were likely to be satisfied. Similar findings were established by KCPS , (1984). This study has examined the association between travelling cost and clients' satisfaction with Family Planning Services.

WAITING TIME AND CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

The time that a client spends at the Family Planning clinic affects her satisfaction with the services offered.

Maine (1981) found that clinics where clients do not spend much time, are more likely to be visited to acquire Family Planning Services and supplies because clients are satisfied.

The findings of Soeradji et al, (1982) in a study of Java-Bali Region in Indonesia also showed that long waiting hours at the clinics affects clients' satisfaction with Family Planning Services and inversely affects use. In the present study, the effect of waiting time on use was not examined but the association between waiting time and clients' satisfaction with Family Planning Services was examined.

Bruce (1989, p.48) in studies carried out in Latin America found that in a clinic setting, irrational or unorganized client flow prolongs waiting time and this dissatisfies the clients.

The findings of KFS (1977/78) and KCPS (1984) blamed the low contraceptive use on the waiting time. In consistence with this, the Cairo Demographic Centre, (1983) showed the negative effect of the service system where clients are delayed on their satisfaction.

Ikamari (1985) found that long waiting time before acquiring supplies and services greatly reduces contraceptive use in Kenya. This was also confirmed by Mungai (1986). However, they did not

look at the effect of total time spent both travelling and waiting time on satisfaction of clients with Family Planning Services as was done in this study.

Dow and Werner (1982) found that on average women spent 1.80 hours at the Family Planning facility to actually obtain supplies and services. Therefore, travelling time inclusive, a total of 5.64 hours are spent. Obviously, the long time spent in travel and at the clinics waiting for services discourage regular contraceptive use.

However, most of the studies above have not looked at the association between waiting time and clients' satisfaction with Family Planning Services as was done in this study.

AVAILABILITY OF PREFERRED METHOD AND CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

Choice of methods reflects both contraceptive effectiveness and availability (Immerwahr, 1981). It also depends on the feasibility of application and reliability of the method (United Nations, 1979).

According to Cairo Demographic Centre (1983), the question of how to reduce fertility is centered on the effectiveness of

contraception used. It is important that a choice of methods be provided so that users have a reasonable, if not utterly equal access to a variety of methods which would otherwise reduce their satisfaction.

Novak et al, (1983) established that availability of preferred method determines use. Most of the clients have a definite method preference and are able to name a method they would not use. The latter was not examined in this study, but the association between availability of preferred method and clients' satisfaction with Family Planning method was determined.

Methods provided should reflect users' needs. Therefore, availability of multiple methods help to also reaffirm program goals which are oriented towards majority fertility reduction (Bruce, 1989). Bruce further argues that real choice is feasible with an adequate variety of methods which help to improve continuity in the use. Likewise, contraceptive prevalence depends on the number of methods available at the service points.

Bruce, as does Jain (1988) are of the opinion that contraception dispensation at the clinics should be tailored to the particular needs and reproductive intentions of the clients. They also agree that the choice of method is a fundamental element of providing quality services.

In Kenya, various studies on availability and choice of methods have been carried out. Mundigo (1973) argues that a range of methods competently provided will attract more acceptors and provide for switching among methods. This acts as the foundation of satisfaction and sustained use. This study has examined availability of preferred method and clients' satisfaction with Family Planning Services.

MOTIVATION AND CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

Contraceptors require constant motivation and follow-up as the reviewed literature shows.

Immerwahr (1981) and Bruce (1989) showed that motivation can range from simple lectures to tangible incentives. Information given to clients in the clinics is part of motivational mechanism which is meant to impart knowledge to clients to help them especially in the choice and switch from one method to another.

Novak et al, (1983) argued that those motivated to use a particular method understate the distance or travel time to obtain that product or service. In this study, the association between motivation and clients' satisfaction with Family Planning Services was examined.

The Kenya Annual Medical Report (1977) shows that home-visits by Family Planning Personnel have become popular follow-up mechanisms which encourage clients to continue using contraceptives. An attempt in this study to find out the number of home-visits paid by Family Planning personnel in the last five years was unsuccessful because most clinics do not keep such records.

Rogo (1988) argues that the free contraceptives provided in the government Family Planning clinics since the start of the Family Planning Program in 1967 have to some extent helped to motivate contraceptive users. However, it is clear that they have not been very strong incentives because contraceptive use is still low in Kenya. Therefore, this study has also tried to find out other motivation mechanisms used in Nairobi. This study attempts to determine the association between motivation of clients and clients' satisfaction with Family Planning Services.

STAFF/CLIENT INTERACTION AND SATISFACTION WITH FAMILY PLANNING SERVICES

The client/provider interactions strongly influence clients by giving them confidence in their own choice of contraceptive methods and satisfaction with the services provided. This ensures a high probability of a return visit and therefore a continued use (Immerwahr, 1981).

The longer the staff stays with and talks to clients, the better is the explanation and clarity at most times. Otherwise, brief interaction with clients dissatisfies them because many questions are unanswered. This was found by Entwisle, et al, (1984) in rural Egypt.

Among the dimensions of client/provider relations in Latin America, Bruce (1989) found that time available for interpersonal exchange reassures clients and makes them more comfortable. She also found that clients identified, trusted and felt free with female nurses and were at ease with them in discussing the sexual dimension of contraceptive use (Bruce, 1989, p.43).

In Kenya, the KCPS investigated on the problems that current users of modern contraceptives face in obtaining services. 25% of the respondents reported that they were afraid of being provided services by young nurses with whom they cannot interact well. This study has not examined the ages of the providers and their effect on contraceptive use. The association between staff/client interaction and clients' satisfaction with Family Planning services was studied.

CLIENTS' HEALTH AFTER ADOPTION OF CONTRACEPTION AND SATISFACTION WITH FAMILY PLANNING SERVICES

Poor health of client after adoption of contraception discourages regular use. The Family Planning Programme should make every effort to be sure that reasonable steps are taken to improve the reproductive health of clients and the pressing health needs directly related to their contraceptive use (Cairo Demographic Centre, 1983).

Clients should be examined for side-effects they might have, and warned about the signs and indications that they should not ignore. For example, some side-effects cause a change in menstrual flow or pattern which can be alarming (Hatcher, 1980-1981).

Women who are desperate to control their fertility will tolerate almost any type of contraception including accepting methods that are incompatible with their health or even life threatening (Bruce, 1989). Bruce argues that clinically, documented and perceived health risk of specific methods to specific women can be avoided through careful choice of contraceptive type. Secondly, she contends that the process of taking personal and family histories in clinics does not tell much about the possibility of the appearance of unpleasant side-effects.

In his study on developing countries, Bulatao (1983) shows that majority of contraceptive discontinuers in the first year of use are attributed to side-effects. The present study has tried to find out whether side-effects also increases the rate at which women shift from one method to the other.

The USA Center for Disease Control (1983) found that increased knowledge about infection promoting effects of different contraceptives increase the health concern in clients' decisions.

Like Bulatao, Hatcher (1980-81) lists down the various side-effects of different contraceptive types. This has also been done in Kenya by the Ministry of Health (Annual Medical Report, 1977). In the present study, women were asked to state the specific medical problems they have suffered since adoption of contraception.

In Kenya, women are screened before they are provided with contraceptives. Thereafter, medical advice is given accordingly. This helps to ensure clients' satisfaction (Rogo, 1988). However, rumours on side-effects have discouraged women from using contraceptives.

Different studies have shown that knowledge imparted on contraceptives is partly meant to enlighten women on health risks or health enhancement in use of contraceptives (KFS, 1977/78 KCPS, 1984; Mungai, 1986).

CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

Clients can either be satisfied or dissatisfied with the type of method, clinic setting, services received or attitude of staff Bruce, (1988).

The U.S.A. Center for Disease Control (1983) measured the rate of switching from one method to another by clients which is a sign of clients' dissatisfaction. In support of this, Bruce, (1989) argued that a clients' ability to switch methods is a key to search for satisfaction and ability to practice contraception for a long time. Bruce further says that good staff/client relations increases the probability of a return visit to the clinic by the client.

In Kenya, clients' dissatisfaction with Family Planning Services has led to poor contraceptive use. Women of high economic status seek private Family Planning Services due to good and satisfying services received there (Rogo, 1988).

It is apparently clear from the literature reviewed above that there are not many studies on contraceptive use done in Kenya. This means that a wide gap of knowledge still exist inspite of the excellent basic data on Fertility and Family Planning gathered in KFS (1977/78) KCPS (1984) and KDHS (1989).

Studies on factors associated with clients' satisfaction with Family Planning Services using a clinic-based approach are scanty. The most popular studies are those based on married women in rural and urban areas. This study has therefore extended on previous studies by considering accessibility, clinic-based, and client factors associated with clients' satisfaction with Family Planning Services.

It is also clear that most previous studies approached contraceptive use problem from marital perspective, but contraceptive use by single women is generally ignored. This study has covered both married and unmarried women.

Further, most studies reviewed are based on secondary data, for example, data from national censuses in Kenya's case. However, this study is based on primary data that was collected from Family Planning Clinics in Nairobi. Secondly, very many studies on contraceptive use have been carried out using macro-analysis

rather than micro-analysis of specific clinic details, as was done in this study.

These then are the points of departure that the researcher has taken in this study.

2.0.2 THEORETICAL FRAMEWORK

Many theoretical formulations have been proposed to show how various factors relate to clients' satisfaction with family planning services. Majority of these formulations have focused on how this affects contraceptive use.

Hermalin, et al, (1982) proposed a basic theoretical model which states that deliberate fertility regulation is a function of motivation to control fertility and cost of fertility regulation. Motivation is assumed to be positively related to contraceptive use, whereas the cost of fertility regulation is relatively related to contraceptive use. It is assumed that other individual and social factors may enter as determinants of the cost of fertility regulation and motivation, but do not have a direct effect on contraceptive use.

The cost of fertility regulation may be both monetary and psychological. Examples of these are monetary costs of

contraceptive devices, travel as cost involved in their procurement as well as travel and psychological costs associated with continued use.

This model poses a few practical problems. For instance, the model does not specify how the psychic costs are to be measured, nor does it specify how individual background variables are related to motivation and cost of fertility regulation.

Lapham and Mauldin (1985 pp. 117-137) proposed another conceptual framework of respondents' background at macro-level. Similar earlier work was done by Easterlin (1978) at micro level, and Freedman (1961-62, p. 32-121) and later by Judith Bruce (1988). The framework shows that an organized Family Planning Program has three major components: policies, resources and stage setting activities; service and service related activities and availability of fertility control supply and services. In this study, the first component which involves these activities played by the government and other private organizations in population policies as regards fertility regulation are not made use of.

The second component of an organized Family Planning Program should be designed to make it easier for people to obtain and use a variety of Family Planning methods. In addition to clinic-based service delivery systems, these activities include

information, education and communication (I.E.&C) activities, the training of personnel in supervision, community based distribution programmes and other service delivery actions. It also includes the provision of incentives for increased use of contraceptives and provision of services or information and education. The clinic-based service delivery systems which is part of this component will be used in this study.

The third component includes availability and accessibility of effective means of fertility regulation mediated through provider transactions with clients in turn lead to its acceptance and continued use (Mauldin and Lapham, 1985, p. 117-137). This component is made use of in this study.

The present study will utilize Judith Bruce Model (1988) which was developed in an attempt to show how quality of services affect the outcome in a Family Planning Program. The Framework analysis, "The Quality of Service Experience: Its origin and Impacts." It develops a description of the structure of the program, the service giving process and the outcome of the care.

This model is related to Lapham and Mauldin (1985) Model. Some of the latter's major components for example, policies and resources are related to Bruce's program effort. Their services, and service related activities and availability and

accessibility of fertility control supply and services are related to Bruce's element in unit of services received.

Like in the present study, Bruce's attention is centered on those who gain access to the clinic services (clients). This study has not made use of the programme effort, but has partly made use of elements in the unit of service received. In addition, it has made use of only two elements of the impacts.

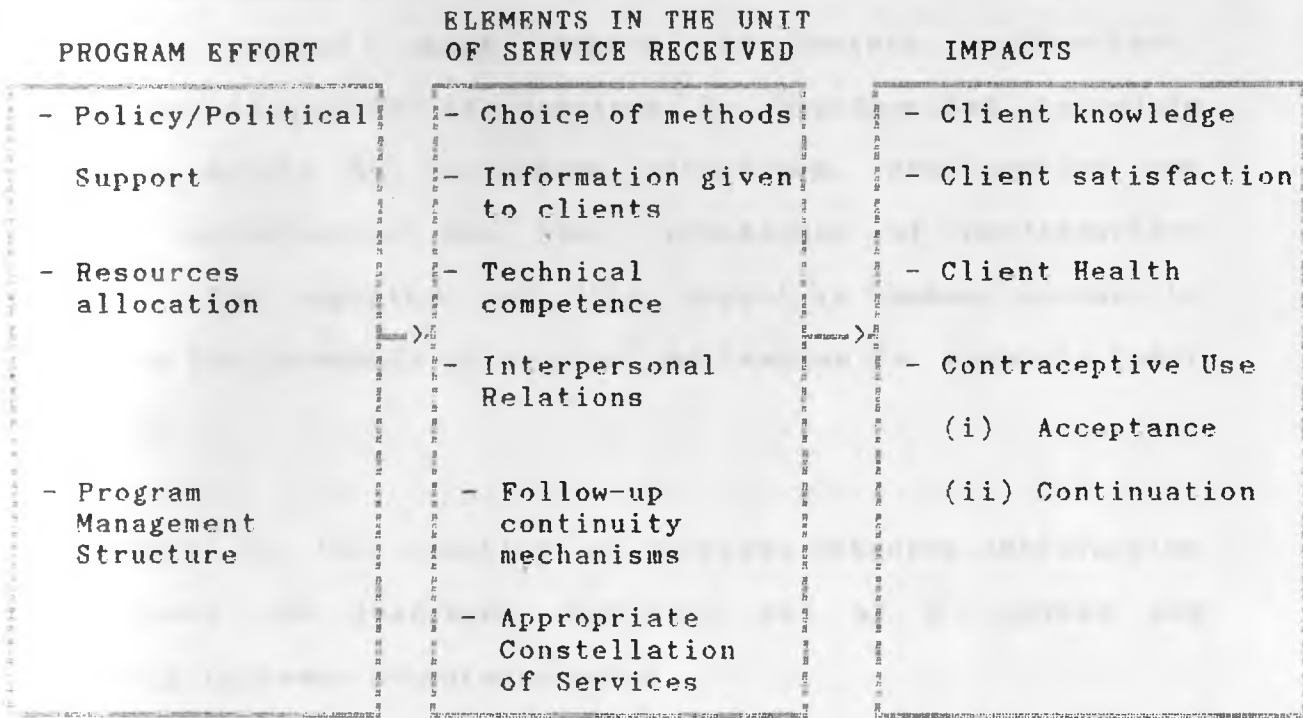
The Framework was developed in an attempt to identify the critical features that make Family Planning Services effective in meeting demand. Despite the intensified concern with program performance and service provision, appraisals of Family Planning Program have generally neglected a central dimension - the quality of care rendered improvements of which will result in a larger, and more committed clientele of satisfied contraceptive users.

Figure 3 below is a graphic display of the framework and the hypothesized relationship between Program Effort, Quality of Service experience and its Impacts, and how all these components are conceptualized.

The Framework was further developed by Jain (1989) through a model which treats fertility as a function of contraceptive prevalence.

FIGURE 4: THEORETICAL FRAMEWORK

THE QUALITY OF SERVICE EXPERIENCE: ITS ORIGIN AND IMPACTS:
(ADOPTED JUDITH BRUCE MODEL)



Source: Fundamental Elements of The Quality Care: A simple Framework, Judith Bruce, 1989, p.9.

Quality of services play a vital role in raising contraceptive prevalence by increasing acceptance and/or continuation rates. These depend on each other and are affected by many other factors like couples desire or motivation to regulate their fertility which is assisted by demand and supply factors. The latter are of interest in this study. They include provision of

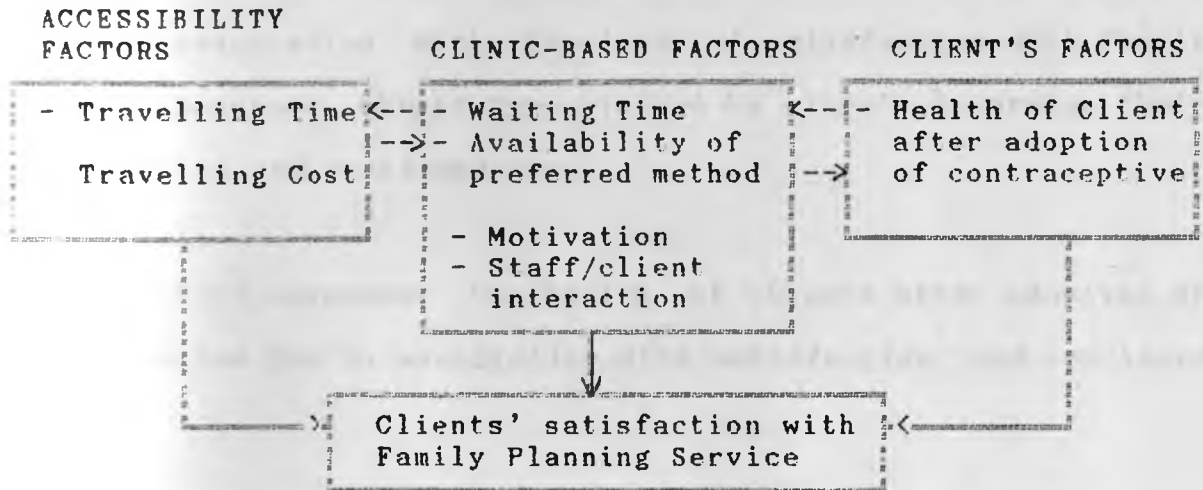
contraceptive methods within easy reach of couples at reasonable costs. Quality of services refer to supply factors. Jain, (1989) argues that enhancement in quality of services can maintain use among initial contraceptive users and even generate additional demand among others in Society. Therefore, improvement in quality of services is hypothesized to reduce fertility mainly by increasing acceptance, continuation and clients' satisfaction and thus prevalence of contraceptive method. The magnitude of this impact is however assumed to depend on the intensity of couples motivation to regulate their fertility.

Improvement in the quantity of services enhances satisfaction among users and increases continued use of a method and indirectly increase acceptance rates.

However, the impact of contraception upon women's health which is part of quality of services is not included in this framework, but was analysed by U.S.A. Center for Disease Control (1983).

An adoption of Judith Bruce Framework made in this study shows the effect of various accessibility, clinic-based factors, and client factors on clients' satisfaction with Family Planning Services. This will be studied using the conceptual model below:

2.0.3 FIGURE 5: CONCEPTUAL MODEL



This conceptual model is based on the argument that the factors (above) are associated with clients' satisfaction with Family Planning Services. The key concepts are accessibility, clinic-based services and client factors. These put together form a model from which operational hypotheses are drawn. The effect of the variables is shown by the direction of the arrows. In the first component, long time used in travel and high expenses incurred dissatisfy Family Planning Clients.

In the second component of clinic based factors clinic and service related activities associated with clients' satisfaction with Family Planning Services are discussed. Variability of methods offered enable clients to switch methods and a likelihood that at least one method is available. Leading to satisfaction

and continued use. Highly motivated clients will utilize services because they are satisfied. Staff/Client interaction has an association with the latter's satisfaction with Family Planning Services, clinic type visited by clients determine their satisfaction and continued use.

In the third component the health of clients after adoption of contraception has an association with satisfaction and continued use.

The rest of the associations shown by broken lines between independent variables are also important but were not examined by the author due to time and resource constraints.

2.0.4 CONCEPTUAL HYPOTHESIS

The satisfaction of clients with Family Planning Services is associated with accessibility, clinic based and client's factors.

2.0.5 ANALYTICAL CONCEPTS

1. Accessibility: Travelling time and cost are the variables derived from this concept.

2. **Clinic-based Factors:** From this concept, variables like waiting time, availability of preferred method, motivation clinic type, and staff/client interaction will be derived.
3. **Client's Factors:** The health of client after adoption of contraception is the variable derived from this concept.
4. **Satisfaction:** From the concept satisfaction is derived as a dummy variable i.e., fulfillment of a need or want (contention).

2.0.6 OPERATIONAL HYPOTHESES

From the conceptual hypothesis, the following operational hypotheses were drawn for testing:-

1. High travelling cost to Family Planning Clinics is closely associated with clients' satisfaction with Family Planning Services.

2. Less travelling time to Family Planning Clinics is highly associated with clients' satisfaction with Family Planning Services.
3. Clients' satisfaction with Family Planning Services is associated with prolonged waiting time.
4. Availability of preferred method of contraception is highly associated with clients' satisfaction with Family Planning Services.
5. Motivated clients are likely to be satisfied with family Planning Services.
6. There exists a close association between good staff/client interaction and clients' satisfaction with Family Planning Services.
7. The health of clients after adoption of contraception is associated with clients' satisfaction with Family Planning Services.
8. Private clinics are likely to have more satisfied clients than public clinics.

2.0.7 INDEPENDENT AND DEPENDENT VARIABLES

INDEPENDENT VARIABLES	DEPENDENT VARIABLE
1. Travelling time	Clients' satisfaction
2. Travelling cost	with Family Planning
3. Waiting time	Services
4. Motivation	
5. Availability of preferred method	
6. Staff/client interaction	
7. Health of client after adoption of contraception.	
8. Clinic type	

2.0.8 OPERATIONAL DEFINITIONS OF VARIABLES

In the following section, an attempt will be made to define the variables in the way that they will be used in the study.

1. TRAVELLING TIME

This refers to the amount of time that a client takes to travel from her residence to a Family Planning clinic. It is measured in terms of hours spent in travel. This depends on the distance between the client's residence and the clinic and also the transportation mode.

2. TRAVELLING COST

This refers to the amount of money that a client spends in transportation to the Family Planning Clinic. It is measured in terms of Kenya Shillings. This also depends on the distance between the clients' residence and the clinic and also the transportation mode.

3. WAITING TIME

This refers to the amount of time spent by the client at the clinic in the process of acquiring services and supplies. It is measured in terms of hours spent in the clinic.

4. AVAILABILITY OF PREFERRED METHOD

This refers to the preferred obtainable method. It is measured in terms of the number of clients who visit the clinic but miss a specifically preferred method. In this study, it is measured as a dummy variable with two categories. It takes the value of 1 if preferred method is available and 0 if preferred method is not available.

5. CLINIC TYPE

This refers to Public and Private clinics. It is measured in terms of the number of clients interviewed from each type of clinic.

6. MOTIVATION OF CLIENTS

This refers to the ways used by clinic management to make clients use and employ contraception with satisfaction. It also encourages continuity of contraception. In this study, it is a dummy variable which takes the value of 1 if a client has been motivated and 0 if one has never been motivated. It is measured in terms of the number of clients who are motivated or not motivated by clinic staff.

7. STAFF/CLIENT INTERACTION

This refers to the social relations between staff and clients. In this study, the variable is a dummy with two categories. It takes the value of 1 for clients reporting positive and 0 for those reporting negative social relations shown towards them by clinic staff. It is measured in terms of the number of clients reporting happy or unhappy social relation.

8. HEALTH OF CLIENT AFTER ADOPTION OF CONTRACEPTION

This refers to the various medical problems that clients have experienced after adopting contraception. The variable is taken as a dummy which takes the value of 1 for clients having health problems and 0 for clients having no health problems after contraception adoption. It is measured in terms of the number of clients who had problems after adopting contraception.

9. CLIENTS' SATISFACTION

This refers to the fulfillment of a want or need (contention) of clients with the services they receive in the clinics. In this study it is measured as a dummy which takes the value of 1 and 0 for satisfied and dissatisfied clients respectively. It is measured in terms of the number of clients who are satisfied or dissatisfied with Family Planning Services. In relation to satisfaction, the time and cost incurred in travel to clinics, waiting time, motivation, staff/client interaction, clinic type, availability of preferred method and client's health after adoption of contraception were measured.

CHAPTER THREE

METHODOLOGY

3.0.0 INTRODUCTION

This chapter describes the study area, the study population, sampling procedures and sample size, methods and procedures of data collection and analysis. This study has used percentages, proportions, means, modes and medians. Other statistical techniques are the cross-tabulations which are used together with the chi-square test. A brief discussion on each of these methods of analysis and methodological limitations are also given.

3.0.1 THE STUDY AREA

The delivery of Family Planning Services like other health services in developing countries have tended to concentrate in urban areas (Freedman et. al, 1988). Therefore, the present study was carried out in Nairobi which has 166 family planning clinics and best Family Planning Services in Kenya (Provincial Population Report, 1988).

A field survey was carried out in Nairobi from December 1989 to early April 1990 covering eleven Family Planning Clinics (see how

the clinics were sampled in section 3.0.5). Of these, eight are City Commission clinics, five from Division I (Eastlands) and three from Division II (Westlands). Two FPAK clinics and the University of Nairobi Family Planning Clinic were also covered. In all the clinics studied 368 clients on revisits (re-attendances) were interviewed. Kenyatta National Hospital Family Planning Clinic was omitted because it draws clients from the whole country.

3.0.2 THE STUDY POPULATION

The Universe (Population) in this study consists of all current Family Planning users in Nairobi in 1987. This was used as the base year because the 1989 records were not completely compiled especially in the City Commission clinics whose records were still at the City Hall at the time of the study. Secondly, the National Statistical Abstract of 1989 that was used to show the Universe has Family Planning records up to 1987. Table 2.1 below shows the attendances in all Family Planning Clinics in Nairobi from which the sample that was studied was drawn.

A sample of 368 clients drawn from Family Planning clinics under study was taken. This was the number possible with the given time and finance available. Only females aged 15-49 were interviewed because they form the bulk of the clientele in these clinics.

TABLE 3.1 ATTENDANCE AT NAIROBI FAMILY PLANNING CLINICS (1981-1987)

YEAR	FIRST VISITS	REVISITS	ACCEPTORS
1981	21,055	113,016	20,520
1982	21,556	122,820	17,257
1983	--	--	--
1984	21,051	110,224	20,844
1985	14,224	122,635	22,766
1986	23,408	72,286	13,078
1987	27,313	76,784	26,520

Source: Statistical Abstract
 Central Bureau of Statistics, (1987)
 Ministry of Planning and National Development
 Government Printers, Nairobi, Kenya.

Table 3.2 only shows the City Commission Clinics, FPAK clinics and University of Nairobi clinic re-attendance cases in 1987.

TABLE 3.2: FAMILY PLANNING REVISIT CASES IN NAIROBI (1987)

CATEGORY OF CLINIC	NAME OF CLINIC	REVISIT CASES (1987)
A. Public Clinics (City Commission Clinics)		
(i) Division I Clinics		
	Mathare Lions	4430
	Eastleigh I	1463
	Eastleigh Lions	3807
	Pangani	2290
	Shauri Moyo	945
	Bahati	1146
	Jerusalem	414
	Hono Crescent	2153
	Charles New Road	1316
	Ofafa	11203
	Maringo	1193
	Mbotela	417
	Posts and Tele. Comm.	714
	Makongeni	863
	Kaloleni	544

	Nairobi South "B"	1723
	Embakasi	1069
	Kariobangi	4758
	Makadara	1404
	Dandora I	4320
	Dandora II	3605
	Umoja	2068
	Industrial Area	98
	Mathare North	339
	Baba Ndogo	-
	Ruaraka	1618
	Kariokor	896
	Pumwani	1277
(ii) DIVISION	Lagos Road	1328
II	Highridge	1618
	Jinnah Avenue	1332
	State House	645
	Woodley	830
	Muthurwa	1540
	Sandiford Road	720
	Karura	2014
	Waithaka	3902
	Riruta	8417
	Karen	4522
	Kangemi	5443
	Langata	3564
	Westlands	4274
	Kahawa	2819
	Ngara	3556
	Family Welfare	-
PRIVATE CLINICS		
(i) FPAK Clinics	Phoenix House	23897
	Pumwani	5734
	Eastleigh	18124
(ii) University of Nairobi	University of Nairobi Clinic	2377
	TOTAL	142,729

Source: Clinic Daily Record Books, 1987

Reproduction is not confined to ever-married women, (Rogo. 1988) therefore, single women were also studied regardless of their social and economic backgrounds. The survey aimed at examining factors associated with clients' satisfaction with Family Planning Services in Nairobi, hence from these women, a picture of their satisfaction or dissatisfaction with Family planning Services was drawn.

3.0.3: TYPE OF DATA

Primary data was collected from Family Planning clients who attended Family Planning Clinics in Nairobi at the time of the survey. This was done through interview which was found to be the most appropriate source of data. Clients who were interviewed were those on revisits.

Data collection instruments used included a basic interview questionnaire designed to measure the descriptive variables.

Supplementary secondary data was also collected from the clinic records.

3.0.4 SAMPLING PROCEDURES

It was impossible for the whole population to be covered because it was too large and the operation would have been too expensive and only limited time was available for the research. The population (Universe) in this study consists of the current Family Planning users in Nairobi. Due to the size of this population, it was necessary to use a sample to save time, labour and finance.

The study is aimed at examining factors associated with clients' satisfaction with Family Planning Services in Nairobi. In order to do this, it was found necessary to use a sampling technique that would allow a representative sample of the clinics and clients to be drawn.

The multi-stage sampling technique was used with clinics and clients forming the primary and secondary sampling units respectively.

In the first sampling stage, eight public clinics managed by the Nairobi City Commission were randomly sampled from 45 clinics (City Commission Family Planning Clinic Records, 1988). Of these, 28 were from Division I (Eastlands), from which 5 (17.9%)

clinics were sampled, and 17 were from Division II (Westlands) from which 3 (17.6%) clinics were sampled.

Three Private clinics were also randomly sampled, two of which are managed by FPAK. Nairobi has 5 FPAK clinics, therefore, the sampled clinics form 40% of them. A higher percentage of FPAK clinics was taken because most of the other private clinics were inaccessible to the principal researcher.

The last randomly sampled clinic is managed by the University of Nairobi with assistance from Family Planning Private Sector (FPPS). Therefore, a total of eleven Family Planning Clinics were randomly sampled in this study by use of random papers of the same size, colour and were folded in the same way.

In the second sampling stage, the sample of clients required was acquired through the systematic random sampling technique. Every sixth client on revisit was interviewed, to reflect the total sample collected (368) which was a sixth of the average number of clients per month from January to March 1987.

The expected sample size would have been 17% (collected in five days per clinic) of the average number of clients per month according to January - March 1987 re-attendance clinic figures. These months were taken to reflect the actual time when the

survey was carried out. However, the actual samples drawn from the clinics were 15% (collected in four and a half days per clinic) of the average number of clients per month according to January-March 1987 figures as shown in table 3.3 and section 3.0.6 below. This was dictated by the time and finance available.

To ensure that randomness and equal time was accorded to all clinics under study. Initially five working days had been allocated for each clinic, but due to time and finance, four and a half was allocated for each clinic (five working days). On the first day, the principal researcher and research assistants introduced themselves. On the second day, we studied the clinic records and necessary information was written down. In the next two and a half days, the actual interviews were carried out.

3.0.5 SAMPLE SIZE

A good deal of information relating to the survey and the population under study depends on the sample size. This is fixed with regard to time, finance and manpower available, the details and precision required in the analysis (Kalton and Moser, 1971).

TABLE 3.3: SAMPLES FOR EACH OF THE CLINIC UNDER STUDY BASED ON 1987 JANUARY - MARCH RECORDS

CATEGORY OF CLINIC	NAME OF CLINIC	MONTHLY REVISITS JAN-MARCH				EXPECTED SAMPLE 17% OF AVE/MONTH	ACTUAL SAMPLE 15% OF AVE/MONTH	
		JAN	FEB	MAR	AVE. NO. OF CLIENTS PER MONTH			
A. PUBLIC CLINICS								
City	Kariokor	64	111	65	80	14	12	
Commission	Bahati	91	135	141	122	21	10	
Division I	Charles New Rd.	--	193	--	193	33	14	
	Dandora I	105	75	108	96	16	29	
	Makadara	57	79	53	63	11	18	
City	Riruta	410	423	427	421	72	64	
Commission	Kangemi	305	340	354	333	57	50	
Division II	Ngara	180	165	195	180	31	27	
B. PRIVATE CLINICS								
(i)	FPAK CLINICS	Phoenix House	667	658	695	673	114	101
		Ribeiro House*	07	70	105	61	10	09
(ii)	UON	Univer- sity of Nairobi Clinic	221	230	229	227	39	34
TOTAL			2107	2479	2372	2319	418	368

SOURCE: Clinic Daily Record Books (1987)

* Ribeiro House Clinic Records For 1990

In this study, the sample size was largely determined by the way the results were to be analyzed. Since the population under study was not highly variable, a sample size of 368 clients was found appropriate. However, were it not for time and financial constraints a sample size of 418 clients was expected as shown in Table 3.3 above. Procedure of how this was calculated is shown below.

$$\text{Expected sample size} = \frac{100}{30 \text{ (Days in a month)}} \times 5$$

$$\text{Actual sample size} = \frac{100}{30 \text{ (Days in a month)}} \times 4$$

224 (60 per cent) of the clients interviewed were from public clinics while 144 (40 per cent) were from private ones.

Table 3.4 below shows that sample size taken from every clinic under study, and the respective clinic category, that is whether it is public or private.

TABLE 3.4: SAMPLE SIZES FROM CLINICS UNDER STUDY

CLINIC CATEGORY	CLINIC NAME	SAMPLE	PERCENTAGE
Public (Division I)	Kariokor	12	3.2
"	Bahati	18	4.9
"	Charles New Rd.	29	7.9
"	Dandora I	14	3.8
"	Makadara	10	2.7
Public Division II	Kangemi	50	13.5
"	Ngara	27	7.3
"	Riruta	64	17.4
Private (FPAK)	Phoenix House	101	27.4
"	Ribeiro House	10	2.7
Private (UON)	University of Nairobi	34	9.2
TOTAL		368	100.0

3.0.6: PROCEDURES OF DATA COLLECTION

(i) QUESTIONNAIRE

The data used in this study was based on a comprehensive structured questionnaire addressed to women aged 15 to 49 (Appendix 1). This was administered by the researcher with the help of research assistants. All respondents were presented with identical questions arranged in the same order. This way, the questions were standardized, and this subsequently left no room for interviewers to modify or change the questions.

Similarly, responses were guided by these questions which were designed to be answered in a short period of time.

The questionnaire covered a wide range of information on dependent and independent variables. The information sought for in the questionnaire was based on accessibility, clinic-based and client factors that are associated to client's satisfaction with Family Planning Services. The questions asked were both retrospective and prospective.

A pre-test of the questionnaire was done to find out whether the questions asked were easily understood by the respondents. It also tested whether the questions were arranged in a logical sequence and whether the questions exhausted the topic under study. A few changes and corrections were made to improve clarity and sequential flow of the questions. Those that were found ambiguous were revised before the questionnaire was administered. Through the pretest, the researcher was able to establish the time required to interview one respondent and also budget for the time required to cover all the sampled clients.

On the whole, this type of questionnaire was found to be convenient because it yielded quantifiable data that was crucial to this study.

(ii) INTERVIEWERS

Three research assistants and the principal researcher interviewed the respondents in the order in which they arrived at the Family Planning Clinics. Research assistants were carefully selected, trained and supervised. The principal researcher also ensured that they understood and followed instructions on how the questionnaires were to be filled. They put forward questions to the respondents and recorded answers obtained on the spot in the pre-coded questionnaires. Finally, they were requested to be courteous to all respondents and clinic-staff who helped them collect the data.

The language used in interviews was either Kiswahili or English, but the choice depended wholly on the respondents' preference.

3.0.7 EDITING AND CODING

Although recording, editing and consistency-checks to avoid lack of uniformity, accuracy, completeness and to detect and eliminate errors was done right in the field, re-editing of all Questionnaires to ensure consistency in the recorded information was done later. Some corrections were done before processing the data.

The aim was to eliminate the loopholes in the data before coding it, and to enhance its quality.

All the information was coded. This involved translating word classification into numbers and clients' responses were classified into meaningful categories.

In this study, information obtained from the questionnaire was accorded appropriate numerical codes for various answers given. Coding was rechecked many times to ensure that information was correctly coded for programming. The data was then entered into the computer after which it was ready for analysis. The entered data was printed, errors checked and corrected.

The programming of the required tabulations was done through the use of the Statistical Package for Social Scientists (SPSS). This facilitated easy and quick computation of data.

3.0.8 METHODS OF DATA ANALYSIS

In the late 1960s and 1970s, the widespread establishment of Family Planning Programs in the developing countries created concern over methodological issues on contraceptive use (Population Report, 1980). Various methods were used. In the study, both qualitative (descriptive) and quantitative

(statistical) methods of data analysis were used. Individual clients formed the basic units of analysis.

(i) DESCRIPTIVE STATISTICS

Measures of central tendency which show where the largest number of items tend to cluster were made use of. For example, mean, mode, and median. Measures of dispersion like the standard deviation and the range were also found to be useful in showing whether or not the figures in the distributions were clustered closely together or were well spread out. Therefore, these measures showed the extent of scatteredness. Where the variation was large as in the case of travel time to various clinics, the causes were identified.

Ratios and proportions were used in the identification of the major characteristics of the clients. Histograms which are a good way of presenting frequency distribution were also used, while Pie-charts were useful in illustrating and comparing the effects of various variables on clients' satisfaction with Family Planning Services.

Tables were of great use in showing clients found in each clinic because tabulated data is presented in a clear and orderly manner which is readily comprehended and leaves a lasting impression and

facilitates quick comparison. From them, it is easier to make summations of items and to detect errors and also to avoid repetitions.

(ii) CROSS-TABULATIONS AND THE CHI-SQUARE TEST

The cross-tabulations were used to establish the distribution of Family Planning clients in Nairobi according to each of the variables under study. They also give an orderly pattern and good results of numerical data which is used in the analytical interpretations of the findings.

In Chapter 3, Part B of this study, cross-tabulations were done for the various variables under study and tables produced showing their frequency distributions.

These contingency tables are used alongside the chi-square (χ^2) test. This is a method of analysis which tests the existence of association between variables in a contingency table. It is commonly used in social sciences to evaluate whether or not frequencies which are empirically obtained differ significantly from the expected under certain theoretical assumptions (Bralock, 1963). Therefore, the situations to which the test is applied are of the type where we have both observed and expected measures and we wish to know whether differences between these

measures can reasonably be explained. It measures the probability of getting a given divergence in a sample from corresponding theoretical values.

The test involves a comparison of frequencies rather than percentages. Sample observations must be independent of each other and randomly drawn from target Population. The larger the difference between the observed and the expected frequencies, the larger is the value of the chi-square (Gupta, 1979).

The observed frequencies were tested in order to find out whether or not they differed significantly from the expected frequencies on the basis of some of the stated null hypothesis (H_0).

The X^2 has a probability distribution of the form:-

$$X^2 = CX (v-2)/2e^{-x^2/2}$$

where, $X > 0$

C = Constant

V = Degrees of Freedom

e = Error term

But the χ^2 approximation that will be use throughout the study is given by the formula in terms of the observed and theoretical (expected) frequencies as,

$$\chi^2 = \frac{\sum (f_o - f_e)^2}{f_e}$$

where, \sum = Summation over all cells in the table

f_o = observed frequencies

f_e = expected frequencies

χ^2 is obtained by first taking the square of the difference between the observed and the expected frequencies in each cell. The division of the square of the difference by the expected frequencies standardizes it, so that the biggest contribution does not always come from the cell with the largest figure. The sum of these non-negative quantities for all the cells is the value of the χ^2 .

In computing the χ^2 , several steps were followed:-

1. The H_0 to be tested was stated.
2. Level of significance at which the hypothesis was tested was stated.

3. The degrees of freedom were worked out. They were determined depending only on the number of cells in the table. Degrees of freedom are given by the formula,

$$(C - 1)(r - 1).$$

4. The H_0 was accepted or rejected after the value of the calculated X^2 was compared with tabulated value of X^2 .

H_0 was only rejected when the calculated value of X^2 was equal to or more than the tabulated value of X^2 at the specified level of significance using the stated degree of freedom (df). In this study, 0.05 level of significance were used to test the stated H_0 .

The X^2 table was used although it is insensitive to the direction of relationships. The test only measures departures of the expected from observed values and does not point any pattern of deviations. When the X^2 is significant it does not show the way in which the variables are related.

The test is not sound unless the number of frequencies in the cells are reasonably large (Bralock, 1963). Therefore, the sample should be distributed in such a way that each expected frequency is larger than five (Renolds, 1977). However, the rule

may be relaxed as long as most cells have expected frequencies greater than five. In this study, the cells with small frequencies were combined in order to keep the expected values above five.

However, on the whole, the X^2 was found to be an appropriate analytical tool for the data used in this study.

2.0.9 METHODOLOGICAL LIMITATIONS

Several problems were encountered while carrying out the research. The interviews in all the surveyed City Commission Clinics were conducted from 8a.m. - 1 p.m. and from 2 - 5 p.m. However, most of the interviews were conducted in the mornings because the Family Planning staff discourage clients from seeking services in the afternoons when they record information collected from every client from individual cards into the Daily Attendance Registers.

It is worth noting that there were more clients at the City Commission clinics on Mondays because formerly, these clinics used to offer Family Planning Services on this day. Consequently, there was a heavy workload for the Principal researcher and research assistants on Mondays than on other days. Interviews at the University of Nairobi Clinic were conducted in

the afternoons only. In the mornings, MCH Services are provided in the same premises except for very few mothers who requested for Family Planning Services as they seek MCH services for their children.

The interviews also took a long time due to language problems. Although both Kiswahili and English were used as the media of communication interviews, there were a few clients who could speak neither of the two languages. In such situations, the clinic staff requested other clients who could speak their mother-tongues to assist. However, this might have affected the quality of data because translation and interpretation of the questionnaire items into another language might not have been adequately done.

Other delays were caused by those who could not recall some past events.

It was not possible to determine the sample size from hospital records because some respondents fail to attend the clinics when they have appointments, others attend without an appointment. However, the sample was drawn from the clinics disproportionately. A larger sample was drawn from the clinics managed by the City Commission where more clients acquire services in order to make the analysis more reliable. But we

were not able to draw samples that were proportional to the number of clients who visited the clinics in 1987 (which was the reference year). Due to the small number of clients re-visiting the clinics at the time when the survey was conducted as mentioned above. Further, the selected sample size calls for caution as the conclusions reached might deviate appreciably from the actual situations. However, to minimize this short-coming, the findings in this study are compared with those of previously related studies.

Initially, the researcher intended to use client-flow analysis which could have been ideal for this study. However, the clinics' management could not allow the principal researcher and research assistants to follow clients recording time spent in every clinic stage due to the privacy that entails Family Planning Services.

It was also intended that the Multiple Regression Analysis would be used. In particular the logit model would have been appropriate for this study because it is a multivariate method and a dichotomous dependent variable would have focused the analysis to the examination of factors associated with clients' satisfaction versus dissatisfaction with Family Planning Services. However, due to lack of access to the Logit Computer Programme, the model was not used. As a result, only

descriptive statistics and the X^2 were used. However, the X^2 was not able to test the strength of the association. There were some cells in the cross-tabulations which had less than five cases. Consequently, some categories of given variables were collapsed. In so doing some important information unique to particular categories was lost and conclusions drawn about the relationships may be inconsistent with those in the underlying population.

Only eight respondents felt that they did not want to be interviewed. It is of importance to note that six of these were from the University of Nairobi Clinic. It was generally observed that most non-responses were from females who were accompanied by men.

In conclusion, any departure from previous findings on similar studies will not necessarily impair the credibility of this study, but rather open an opportunity for explaining the empirical situation in the study area.

CHAPTER FOUR

FAMILY PLANNING USERS AND CLIENTS' SATISFACTION

4.0.0 INTRODUCTION

This chapter presents and interprets the results of variables which are associated with clients' satisfaction with Family Planning Services.

As pointed out in chapter three, this study has made use of descriptive statistics, cross tabulations and the X^2 test for data analysis.

The chapter is divided into three sections. Section 4.1 deals with the socio-economic and demographic backgrounds of the respondents. Section 4.2 discusses factors associated with clients' satisfaction with Family Planning Services. Here, descriptive statistics like frequency tables, percentages and graphs are used. Cross tabulations and the X^2 test results are also presented. Lastly, section 4.3 is the summary to the findings.

In this chapter, the hypotheses developed in chapter one were also tested and the association between each of the independent variables with the dependent as well as their significance were established. Results from each hypothesis were individually analysed and all pertinent data discussed.

4.1 THE SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS.

A sample of 368 clients aged 15-49 was drawn from clinics under study. Some of their socio-economic and demographic characteristics that are related to the variables under study are described below. These are: current residence, current age, education, income, marital status, age at first marriage, parity, reproductive intentions, age at first contraception, previous contraceptive source, current contraceptive source, parity at first contraception, and frequency of clinic visits.

CURRENT RESIDENCE

The following results were found concerning their current places of residence. While 36.7 per cent of the clients live in Nairobi, 10.4 per cent live in rural areas and 2.8 per cent are from other urban areas in Kenya, but they utilize Family Planning Services in Nairobi clinics. These figures are illustrated in Table 4.1a below.

TABLE 4.1a THE DISTRIBUTION OF CLIENTS BY CURRENT RESIDENCES

CURRENT RESIDENCE	NUMBER	PERCENTAGE
Nairobi	319	86.7
Rural	39	10.4
Other Towns	10	2.8
TOTAL	368	100.0

Clients' residence determines the amount of time and cost incurred in travel to the clinic or how accessible a client is to Family Planning Services. Those living in Nairobi spend less time and money in travel but not satisfied with the services provided in the clinics under study.

THE DISTRIBUTION OF CLIENTS BY CURRENT AGE

A comparison of the KDHS, (1989) results shows that 17.3 per cent of the women lived in urban areas, and 82.7 per cent in rural areas. However, this was a national study compared to the present urban study.

CURRENT AGE

The age distribution of clients is presented in figure 6 and table 4.2a below. The ages are given in quinquennial categories. 4.6 and 31.5 per cent of the clients fall in 15-19 and 20-24 age groups. The largest number of clients 33.1 per cent are aged

25-29 years. From these figures, majority of the women under study still had many reproductive years ahead of them and partly explains why they continue using the Family Planning Services in spite of their dissatisfaction. This helps to determine the level of clients' satisfaction with Family Planning Services. The percentage of clients decrease with increasing age. 18.2, 9.3 and 2.1 per cent were aged 30-34, 35-39 and 40-45 respectively. Only 1.2 per cent were aged 45-49 years. These figures can be compared with FDHS, (1989) results where 20.9 per cent were aged 15-19 and 6.2 per cent were aged 45-49 years. As in the present study, those aged 25-29 had the highest proportion (33.1 per cent).

TABLE 4.2a THE DISTRIBUTION OF CLIENTS BY CURRENT AGE

CURRENT AGE (YEARS)	FREQUENCY	PERCENTAGE
15 - 19	17	4.6
20 - 24	116	31.5
25 - 29	122	33.1
30 - 34	67	18.2
35 - 39	34	9.3
40 - 44	8	2.1
45 - 49	4	1.2
TOTAL	368	100.0

THE DISTRIBUTION OF CLIENTS BY CURRENT AGE

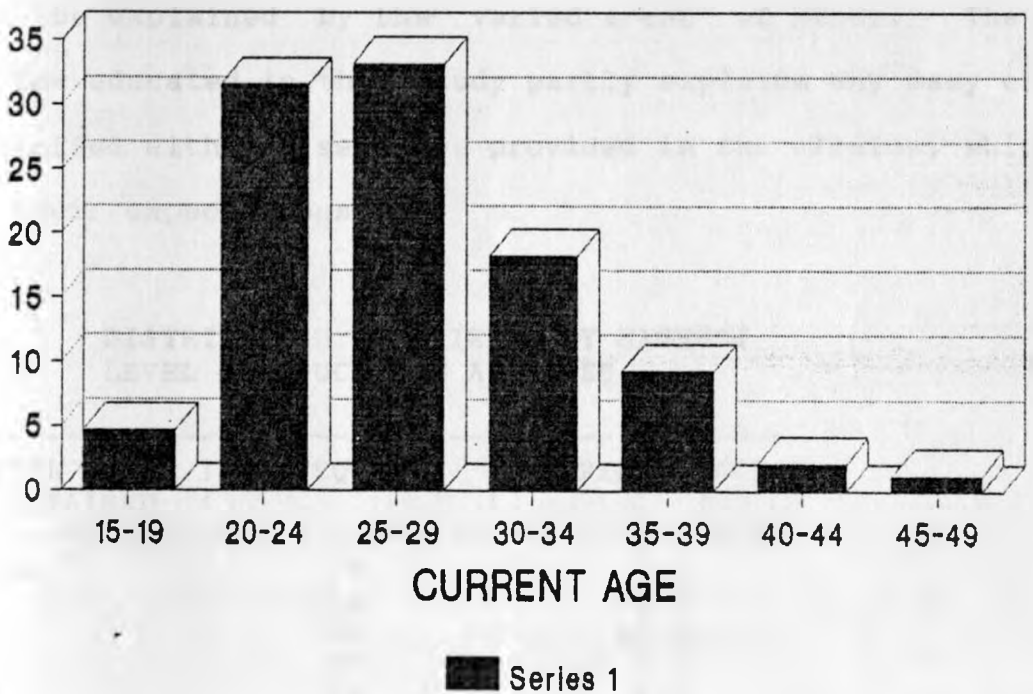


Figure 6

EDUCATION

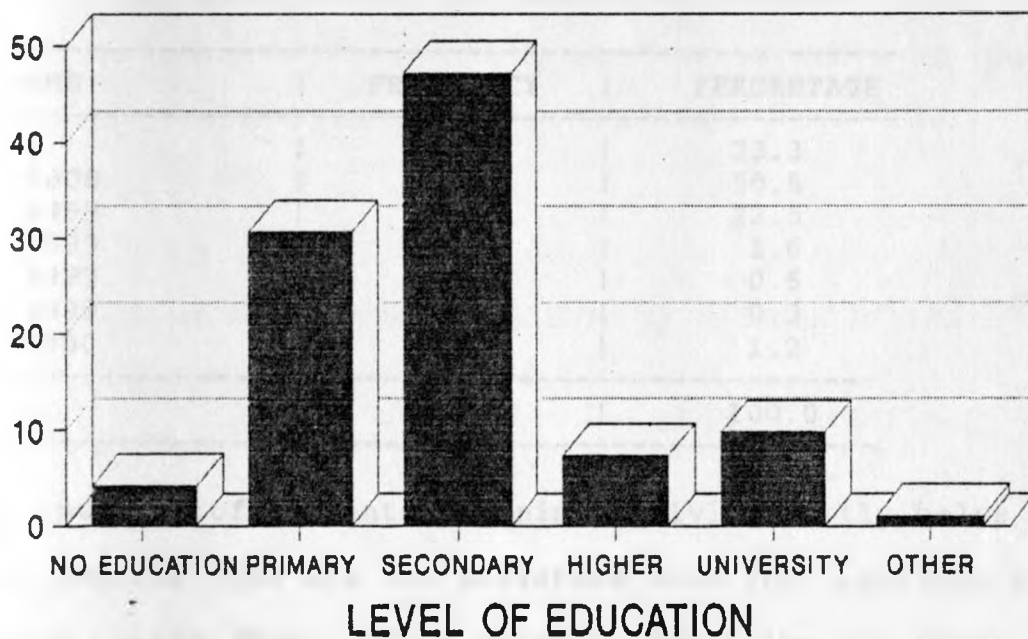
The educational background of the clients show that only 4.2 per cent of them had no formal education, 30.5 and 47.2 per cent had attained primary and secondary education respectively, while 7.3 and 9.8 per cent had higher and University education respectively. This is illustrated in table 4.3a below and in figure 7.

Compared to KDHS, (1989) results, this is almost similar because 4.2 per cent of the clients had no education in Nairobi and Mombasa while 43 and 37 per cent had primary and secondary and higher education. The different results in the present study and in KDHS (1989) can be explained by the varied areas of study. The large number of the educated in this study partly explains why many clients are dissatisfied with the services provided in the clinics, which are not up to their expectations.

TABLE 4.3a DISTRIBUTION OF CLIENTS BY HIGHEST LEVEL OF EDUCATION ATTAINED

HIGHEST LEVEL OF EDUCATION ATTAINED	FREQUENCY	PERCENTAGE
No Education	16	4.2
Primary	112	30.5
Secondary	174	47.2
Higher	27	7.3
University	36	9.8
Other	3	1.0
TOTAL	368	100.0

THE DISTRIBUTION OF CLIENTS BY LEVEL OF EDUCATION



Series 1

Figure 7

INCOME STATUS

Income is important to contraceptive use (Ikamari, 1985). However, in this study, 23.3 per cent of the clients were not earning an income. Over one-half of the clients (50.5 per cent) earned less than 1000 KShs. and 22.5 and 1.6 per cent earned between 1000 - 1999 KShs. and 2000 - 2999 KShs. respectively. Only a small number of clients, 0.6 and 0.3 per cent were in high income brackets between 3000 - 3999 KShs. and 4000 - 4999 KShs. Lastly 1.2 per cent of the clients earned over 5000 KShs. This information is illustrated in table 4.4a below.

The high number of married women with a higher risk

TABLE 4.4a THE DISTRIBUTION OF CLIENTS BY INCOME

INCOME (KSHS)	FREQUENCY	PERCENTAGE
Not Earning	86	23.3
Less than 1000	186	50.5
1000 - 1999	83	22.5
2000 - 2999	6	1.6
3000 - 3999	2	0.6
4000 - 4999	1	0.3
Over 5000	4	1.2
TOTAL	368	100.0

The large number of clients earning a living partly helps to explain why many of them are not satisfied with the services but they continue using them. This helps to determine the level of satisfaction. Their time is divided between child-bearing and rearing and income earning.

MARITAL STATUS

Nuptiality results in this study table 4.5a below coincide with those of KCPS, (1984) where 86 per cent of the respondents' were married women. In this study, 65.8 per cent were married, but 20.6 had never been married.

The rest 13.6 per cent were either divorced, widowed or separated as compared to 8.0 per cent in the KCPS, (1984). From KDHS, (1989) results, 63.1 per cent were married, but 26.0 per cent were not. The rest 7.3 per cent were either divorced, separated or widowed. The high number of married women with a higher risk of conception (Bulatao, 1983) partly helps to explain why many clients continue using family planning services in spite of their dissatisfaction. This helps to determine the level of satisfaction.

TABLE 4.5a THE DISTRIBUTION OF CLIENTS BY MARITAL STATUS

MARITAL STATUS	FREQUENCY	PERCENTAGE
Married	242	65.8
Unmarried	76	20.6
Divorced	13	3.6
Widowed	10	2.7
Separated	27	7.3
TOTAL	368	100.0

AGE AT FIRST MARRIAGE INTENTION OF CLIENTS OF PARITY

Various ages at first marriage were reported by respondents. The highest was 29 years, while the lowest was 14 years. The mean age at marriage was found to be 17.019 years. This is relatively low and helps to explain why many clients continue using family planning services although they are dissatisfied, thus a low level of satisfaction as hypothesised in this study.

PARITY

Most of the clients had low parities. The highest proportion (27.7 per cent) had two living children while 24.2, 9.0 and 6.3 per cent had one, three and four children respectively. Only 9.0 per cent had more than four children, but 22.0 per cent had no living children as table 4.6a shows. To maintain the low parities, availability of preferred method is important as presumed in chapter two, but many clients have continued using the services provided in the clinics although they are dissatisfied.

REPRODUCTIVE INTENTION

When asked about their future reproductive intentions, clients had the following responses:- 40.2 per cent did not want any more

Table 4.6a

THE DISTRIBUTION OF CLIENTS BY PARITY

NUMBER OF CHILDREN	FREQUENCY	PERCENTAGE
0	82	22.0
1	89	24.2
2	102	27.7
3	33	9.0
4	30	8.1
5	23	6.3
OVER 5	9	2.7
TOTAL	368	100.0

children, 30.6 per cent, 22.3 per cent and 4.9 per cent reported that they wanted one, two and three children respectively (Table 4.7a). Generally, clients would like to have smaller families because when asked about the number of children they would like to have if they restarted reproduction, 9 per cent reported only one child, while 39.7, 28.3 and 21.7 per cent would like two, three and four children respectively. However, only 2.2 per cent would like more than four children. This was meant to indirectly reflect their desired number of children. This is partly determined by client's health after adoption of contraception, which was hypothesised to be associated with clients' satisfaction with Family Planning Services. There is a high need of contraception which supercedes clients' satisfaction if their parities have to be kept low.

TABLE 4.7a DISTRIBUTION OF CLIENTS BY ADDITIONAL NUMBER OF CHILDREN

ADDITIONAL NO. OF CHILDREN	FREQUENCY	PERCENTAGE
0	152	40.2
1	113	30.6
2	82	22.3
3	18	4.9
4	10	2.7
5	1	0.3
TOTAL	368	100.0

AGE AT FIRST CONTRACEPTION

An observation of clients' age at first contraception shows that the bulk of the clients, 61.8 per cent started contraception at ages 20 - 24. The lowest and highest ages at first contraception were 15 and 33 years. These figures show that most of the clients under study started contraception at low ages. This can be explained by their high educational level and urban residence of the majority which expose them to contraceptives early in life.

PREVIOUS CONTRACEPTIVE SOURCE

Clients' responses on previous contraceptive acquisition partly helps to determine availability of preferred method and type

staff/client interaction. Results from this study show that 31.8 per cent of them had obtained Family Planning Services elsewhere other than the clinics at which they were interviewed, but 32.2 per cent had not. Of those who had sought services elsewhere, 5.0 per cent had done so from mobile Family Planning Clinics, 47.7 per cent from hospitals compared to 55.1 per cent from the KCPS (1984) results. Only 1.4 per cent had acquired them from Family Planning Field workers and 2.7 per cent had bought them from a pharmacy or shop and 10.5 per cent from private doctors. 0.5 per cent had got them from other sources, mainly borrowing from friends, as presented in Figure 8.

Various reasons were given as to why they stopped obtaining services from these sources. 33.8 per cent were discouraged by the poor services, 1.4 per cent by poor attitude shown by clinic staff and 25.0 per cent by distance. Only 1.4 per cent reported discouragement due to lack of supplies, 7.3 per cent did so due to the high cost of supplies, and 19.3 per cent by other reasons.

These results help to show the various reasons for clients/dissatisfaction with Family Planning Services. From these results availability of preferred method and staff/client interaction can partly be explained. Few clients stopped seeking Family Planning Services elsewhere due to poor staff/client interaction and availability of preferred method.

THE DISTRIBUTION OF CLIENTS BY PREVIOUS CONTRACEPTIVE SOURCE

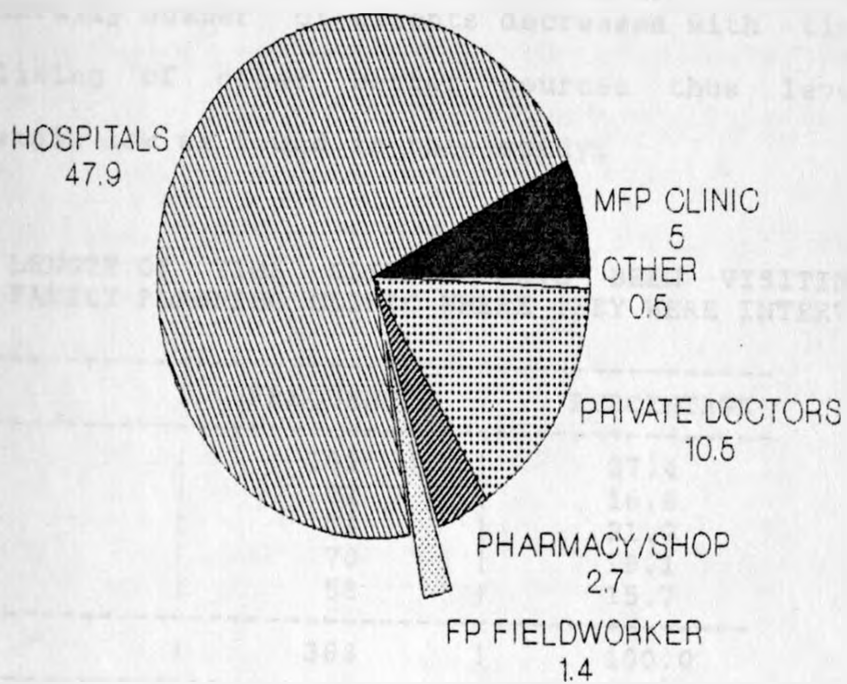


Figure 8

CURRENT CONTRACEPTIVE SOURCE

Clients were asked how long they have been visiting the clinics they were interviewed from. The following results were found 27.4 per cent had done so for 1 - 6 months, 16.6 per cent for 7-12 months, 21.2 per cent for 1 - 2 years, 19.1 per cent for 3-4 while 15.7 per cent had done so for more than five years as shown in Table 4.8a below. These results would partly help to explain clients' satisfaction with Family Planning Services because it was assumed that clients continued seeking Family Planning Family Services from the same clinic if the services were good. Generally number of clients decreases with time may be after realising of other better sources thus level of satisfaction remain low as found in this study.

TABLE 4.8a LENGTH OF TIME CLIENTS HAVE BEEN VISITING THE FAMILY PLANNING CLINIC WHERE THEY WERE INTERVIEWED

TIME IN MONTHS	FREQUENCY	PERCENTAGE
1 - 6	101	27.4
6 - 12	61	16.6
12 - 24	78	21.2
24 - 48	70	19.1
48+	58	15.7
TOTAL	368	100.0

PARITY AT FIRST CONTRACEPTION

Various answers were given concerning the number of children clients had at the time they first contracepted. 15.2 per cent had no child. 34.5, 25.1 and 14.9 per cent had one, two and three children respectively. Only 5.4 per cent had four children while, 4.6 per cent had more than four children. Therefore, most clients did not have high parities when they first contracepted as shown in Table 4.9a below. This shows that they realized the need for contraception before their families were too large. Their satisfaction or dissatisfaction with the services provided in the clinics are of a less importance compared with the need to contracept in order to keep their parities low. This explains why some of the clients continue visiting the clinics yet they are dissatisfied with the services, hence a low satisfaction level as found out in this study.

TABLE 4.9a DISTRIBUTION OF NUMBER OF CHILDREN CLIENTS HAD AT FIRST CONTRACEPTION

NUMBER OF CHILDREN	FREQUENCY	PERCENTAGE
0	56	15.2
1	127	34.5
2	92	25.1
3	55	14.9
4	21	5.7
5	17	4.6
TOTAL	368	100.0

FREQUENCY OF CLINIC VISITS

When asked how often they visit Family Planning Clinics, clients had the following responses:- 24.7 per cent do so once a month, 48.6 per cent once every three months, 11.1 per cent once every six months, 4.4 per cent and 8.2 per cent do so once every nine and twelve months respectively, while only 3.0 per cent do so at other times, for example on arrangement with clinic staff or when there is need (Table 4.9a). Most clients were not in favour of frequent visits to the clinics on monthly basis especially for those who had used contraceptives for less than six months or for those whose contraceptive management is poor. They cited travelling cost in terms of money and time being too high. Thus, this might be related to their satisfaction with the services provided. Although from the X^2 tests travelling time and cost were not found to be associated with clients' satisfaction with Family Planning Services a few clients used them to show why they preferred less frequent clinic visits.

TABLE 4.10a THE DISTRIBUTION OF CLIENTS' CLINIC VISITS

FREQUENCY OF CLINIC VISITS IN MONTHS	FREQUENCY	PERCENTAGE
Once a Month	91	24.7
Once every 3 Months	179	48.6
Once every 6 Months	41	11.1
Once every 9 Months	16	4.4
Once every 12 Months	30	8.2
Other times	11	3.0
TOTAL	368	100.0

4.2.0 FACTORS ASSOCIATED WITH CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES IN NAIROBI

In this section, the chi-square (χ^2) statistical technique is computed to test all the formulated hypotheses. Each hypothesis is individually analyzed and all pertinent data briefly discussed. An alpha level (Level of significance) of 0.05 was used to test the significance of each hypothesis. Thereafter, the hypothesis was verified using the observed and expected frequencies of the variable in question.

Descriptive statistics are also used in establishing percentage distributions, mean, mode and ratios of the independent variables in relation of clients' satisfaction with Family Planning Services. Graphic presentations are also used.

4.2.1 CLINIC TYPE AND CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

In this study, clinics were categorized into public and private clinics, depending on their management and clients that they serve. A X^2 test was conducted to test the association between clinic type and clients' satisfaction with Family Planning Services.

As given in the preceding chapter, throughout this study, the X^2 is given by the formular below:-

$$X^2 = \frac{(f_o - f_e)^2}{f_e}$$

Where f_o = Observed frequencies

f_e = Expected frequencies

It was hypothesized that clinic type is associated with clients' satisfaction with Family Planning Services. A X^2 test was carried out to test the null hypothesis (H_o) below. The H_o to be tested states:-

H_o = There is no significant association between clinic type and clients' satisfaction with Family Planning Services.

The hypothesis was tested at 0.05 level of significance. All the expected frequencies figures are in brackets as in (Table 4.1b) They were used in the calculation of the X^2 .

TABLE 4.1b THE OBSERVED AND EXPECTED FREQUENCIES OF CLINIC TYPE ACCORDING TO CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

SATISFIED/DISSATISFIED	FREQUENCIES		TOTAL
	PUBLIC	PRIVATE	
SATISFIED	56 (67.6)	55 (43.4)	111
DISSATISFIED	168 (156.4)	89 (100.6)	257
TOTAL	224	144	368

From the statistical tables, X^2 at 1 degree of freedom and at 0.05 level of significance is 3.841. The X^2 calculated is 7.29. Therefore, we can reject the H_0 and accept the alternative hypothesis H_1 because the calculated X^2 is greater than the tabulated. H_1 states:-

H_1 = There is a significant association between clinic type and clients' satisfaction with Family Planning Services.

Therefore, the type of clinic that a client visits influences her satisfaction with the services. This shows that the variable is significant.

These results confirm results of earlier studies. Oyediran, (1976) and Immerwahr, (1981) found that clinic type clients' satisfaction with Family Planning Services and continued use. From Table 4.2b below, out of the 368 clients studied, only 30.2 per cent were satisfied while the majority, 69.8 per cent were dissatisfied with the services provided in Family Planning Clinics in spite of their continued use.

A comparison of the public and private clinics presented in table 4.2b below show that one-quarter of the clients in public clinics were satisfied compared to 38 per cent in private. 75 per cent of the clients in public and 62 per cent in private were dissatisfied.

TABLE 4.2b THE DISTRIBUTION OF CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES BY CLINIC TYPE

SATISFIED/DISSATISFIED	CLINIC TYPE		TOTAL
	PUBLIC	PRIVATE	
SATISFIED			
NUMBER	56	55	111
PERCENTAGE	25	38	30.2
DISSATISFIED			
NUMBER	168	89	257
PERCENTAGE	75	62	69.8
TOTAL			
NUMBER	224	144	368
PERCENTAGE	100	100	100

The relatively large percentage of dissatisfied clients in public clinics show that services in these clinics are poorer. These results also show that clinic types determines clients' satisfaction with Family Planning Services. The hypothesis formulated in chapter one that private clinics are likely to have more satisfied clients is acceptable. These findings are consistent with the report of Entwisle, et. al. (1984) which shows that more clients are likely to visit clinics in private sector where better services are provided and more clients satisfied.

Table 4.3b below shows the distribution of clients by specific clinics and clinic type. The greatest proportion (224 clients) 60.9 per cent were from public clinics. From these clinics, the biggest number of respondents was from Riruta (Kawangware) with 41.9 per cent of all clients studied, while the least proportion was from Fariokor with 3.3 per cent of the clients. The large number of clients was taken from public clinics because most Family Planning Clients visit public clinics (Rogo, 1988).

Among private clinics, Phoenix House had the highest proportion of clients (27.4 per cent) even among both public and private clinics. The newly opened Ribeiro House Clinic had the least proportion of clients of 2.5 per cent. In total, the private

clinics had 144 clients (39.1 per cent). A lesser proportion of clients was taken from private clinics because fewer clients visit them (Rogo, 1988).

TABLE 4.3b THE DISTRIBUTION OF CLIENTS BY CLINIC TYPE

CLINIC TYPE	CLINIC NAME	FREQUENCY	PERCENTAGE	CUMULATIVE PERCENTAGE
PRIVATE	Phoenix House	101	27.4	27.4
"	Ribeiro House	09	2.5	29.9
"	U. O. N.	34	9.2	39.1
SUB-TOTAL		144	39.1	39.1
PUBLIC	Kariokor	12	3.3	42.2
"	Bahati	10	2.7	45.1
"	Charles New Rd	14	3.8	48.9
"	Dandora I	29	7.9	56.8
"	Makadara	18	4.9	61.7
"	Kangemi	50	13.6	75.3
"	Ngara	27	7.3	82.6
"	Riruta	64	17.4	100.0
SUB-TOTAL		224	60.9	100.0
GRAND TOTAL		368	100.0	100.0

4.2.2 THE LEVELS OF CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICE

The Table 4.4b and figure 9 below illustrates the percentage distribution of the levels of clients' satisfaction with Family Planning Services as measured on Five level Guttman's scale. Of all the clients studied, 2.7 per cent reported that they were

very satisfied compared to 8.2 per cent who were satisfied. 19.3 per cent of the clients reported that the services were okay, while 59.8 per cent were dissatisfied with them. Lastly, only 9.8 per cent of the clients reported that they were very dissatisfied with the services.

TABLE 4.4b THE DISTRIBUTION OF CLIENTS' ACCORDING TO SATISFACTION WITH FAMILY PLANNING SERVICES

LEVEL OF SATISFACTION	FREQUENCY	PERCENTAGE
Very Satisfied	10	2.7
Satisfied	30	8.2
Okay	72	19.3
Dissatisfied	220	59.8
Very Dissatisfied	36	9.8
T O T A L	368	100.0

These figures show that the degree of satisfaction and dissatisfaction vary greatly among the clients. Family Planning Services are poor because less than one-third of the clients reported that they were satisfied. The rest of the clients were dissatisfied with the services. Figure 9 is a graphic presentation of clients' satisfaction levels. From these results, few clients gave extreme answers, either very satisfied or very dissatisfied. Probably this was caused by their lack of justification for continued use of the services provided in the clinics. Many clients (19.3 per cent) gave a non-committal stand that the services were okay.

THE DISTRIBUTION OF CLIENTS' BY LEVELS OF SATISFACTION WITH FP SERVICES

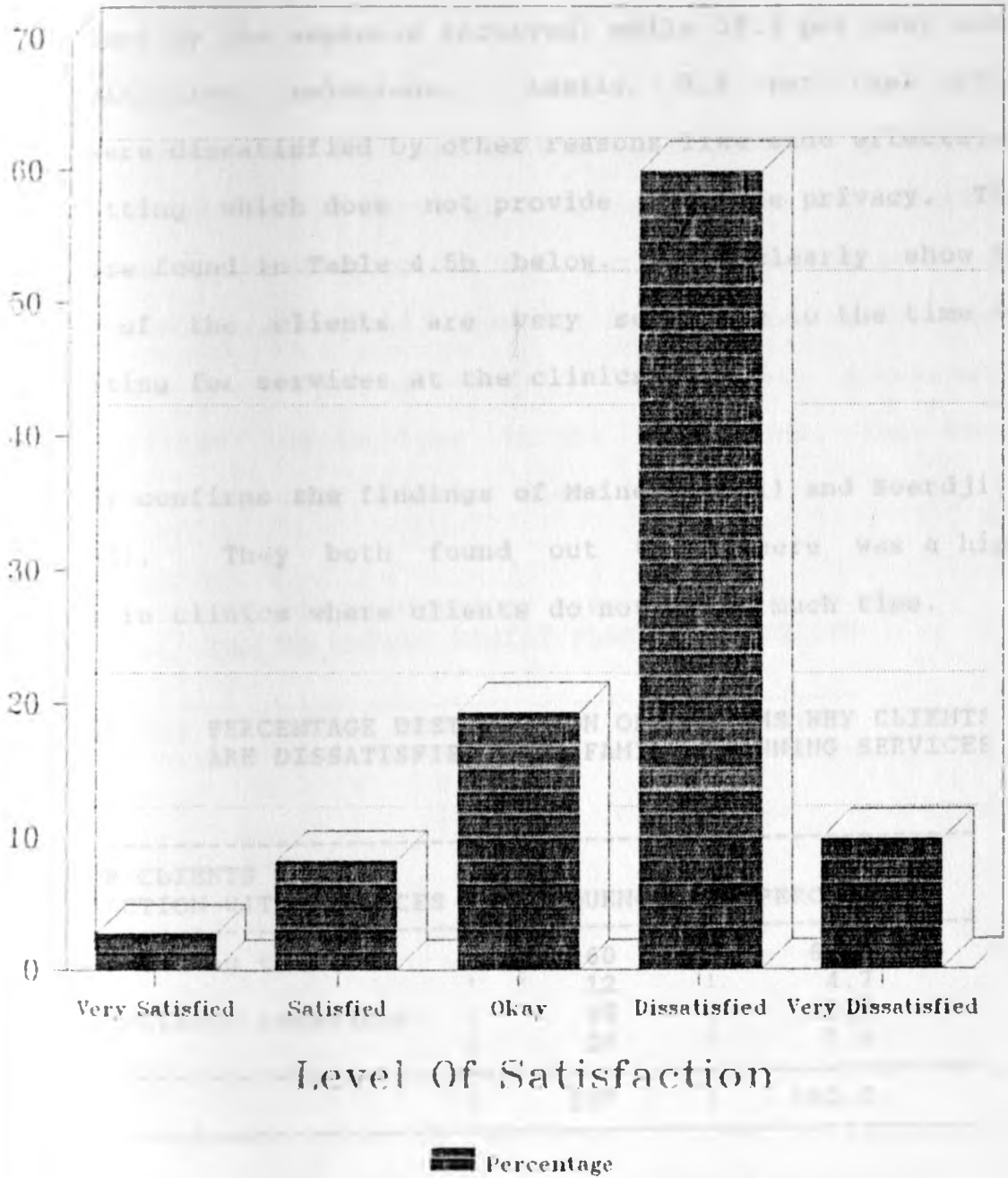


Figure 9

various specific reasons contribute to clients' dissatisfaction with the services. Of the sample studied, 257 of the clients gave reasons for being dissatisfied. For example 62.2 per cent were dissatisfied by the prolonged waiting time at the clinics, 4.7 per cent by the expenses incurred, while 25.3 per cent was by poor staff/client relations. Lastly, 7.8 per cent of the clients were dissatisfied by other reasons like side effects, and clinic setting which does not provide adequate privacy. These figures are found in Table 4.5b below. They clearly show that majority of the clients are very sensitive to the time they spend waiting for services at the clinics.

This study confirms the findings of Maine, (1981) and Soerdji, et al, (1982). They both found out that there was a higher clientele in clinics where clients do not spend much time.

TABLE 4.5b PERCENTAGE DISTRIBUTION OF REASONS WHY CLIENTS ARE DISSATISFIED WITH FAMILY PLANNING SERVICES

REASON FOR CLIENTS DISSATISFACTION WITH SERVICES	FREQUENCY	PERCENTAGE
Prolonged waiting time	160	62.2
Expenses	12	4.7
Poor Staff/Client relations	65	25.3
Other	20	7.8
T O T A L	257	100.0

To investigate further why clients are dissatisfied with Family Planning Services, information was collected regarding the time of the day they would prefer to obtain services from Family Planning Services.

An examination of the reported preferred time of the day in Table 4.6b below shows that 60.6 per cent of the clients preferred to obtain services in the morning, 27.2 per cent in the afternoons, 7.6 per cent in the evening but 4.6 per cent had no preference. None of the clinics studied provides family planning services in the evenings in public clinics. Clients are encouraged to acquire services and supplies in the afternoons. This shows a genuine reason for many clients' dissatisfaction.

TABLE 4.6b THE DISTRIBUTION OF PREFERRED TIME OF THE DAY TO OBTAIN FAMILY PLANNING SERVICES

PREFERRED TIME OF DAY	FREQUENCY	PERCENTAGE
Morning	223	60.6
Afternoon	100	27.2
Evening	28	7.6
No Preference	17	4.6
T O T A L	368	100.0

These results are comparable with KCPS, (1984) results on urban contraceptive users where 21 per cent had no preference for a particular time of the day, while 38 per cent preferred to

obtain their services in the mornings, while 18 and 10 per cent preferred afternoons and evenings respectively.)

From the clients' responses there is need to give freedom of choice as regards time of the day when they can visit the clinics. For example, those who preferred to have family planning services in the evenings were not catered for in the clinics under study.

4.2.3 TRAVELLING TIME TO FAMILY PLANNING CLINICS AND CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

Time taken to travel to Family Planning Clinics is a measure of accessibility. In this study, it was recorded in total number of hours it took the respondent to get to the clinic. It was put in four categories of time.

A X^2 test was done to test whether travelling time to the clinics is significantly associated with clients' satisfaction with Family Planning Services. The H_0 used states:-

H_0 : There is no significant relationship between travelling time to Family Planning Clinics and clients' satisfaction with Family Planning Services.

This hypothesis was tested at 0.05 level of significance at 2 degrees of freedom. The χ^2 tabulated (5.991) is greater than the χ^2 calculated (2.060). This shows that the variable is not significant. The variable was also tested at 0.010 level of significance at 2 degrees of freedom. The tabulated χ^2 is 4.605 which is still more than χ^2 calculated. Therefore, the variable is not significant. The contingency table 4.7b below shows the observed and expected frequencies of the respondents with respect to travelling time for Family Planning Clinics in Nairobi that were used in calculation of the χ^2 .

TABLE 4.7b THE OBSERVED AND EXPECTED FREQUENCIES OF TRAVELLING TIME TO FAMILY PANNING CLINICS ACCORDING TO CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

SATISFACTION	TRAVELLING TIME IN HOURS			TOTAL
	LESS THAN 1	1 - 2	OVER 2	
SATISFIED	92 (95.3)	16 (13.3)	3 (2.4)	111
DISSATISFIED	224 (220.7)	28 (30.7)	5 (5.6)	257
T O T A L	316	44	8	368

Lack of association between travelling time and clients' satisfaction can be explained by the fact that most of the clients studied live in Nairobi, thus they take less time to the clinics. Therefore dissatisfaction of some of them is caused by other factors. These findings were contrary to studies done elsewhere and could partly be attributed to the present urban-based type of study where clinics are

are accessible hence, there is little travelling time by clients. These results are contrary to Porter's (1984) study of the Republic of Dominica in which he found that travelling time affected clients satisfaction with the services.

Table 4.8b shows reported travel time to the clinics. There are substantial differences in travel time. 85.9 per cent of the clients take less than 1 hour to the clinics. Of these, 25 per cent were satisfied, but 60.9 per cent were not. 12.8 per cent took 1-2 hours to the clinics. From this figure, 7.6 per cent were not. The least number of clients (2.1 per cent) report a travel time of over 2 hours. Of these 1.3 per cent were dissatisfied while 0.8 per cent of them were satisfied.

4.8b THE DISTRIBUTION OF TRAVELLING TIME TO FAMILY PLANNING CLINICS AND CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

Satisfaction	FREQUENCIES				PERCENTAGES			
	<1HR	1-2HRS	OVER 2HRS	TOTAL	<1 HR	1-2HRS	OVER 2HRS	TOTAL
Satisfied	92	16	3	111	25.0	4.4	0.8	30.2
Dissatisfied	224	28	5	257	60.9	7.6	1.3	69.3
TOTAL	316	44	8	368	85.9	12.0	2.1	100.0

These results are comparable with KCPS, (1984) results which showed that 78 per cent of the contraceptive users could reach the sources within an hour in urban areas.

In his study on Kenya, Dow, (1981) found that to obtain a Family Planning method, women required a mean travelling time of 1.92 hours. However, in the present study, a lower mean of 1.66 hours and a mode of 1.00 hours was found.

Kamari, (1985) found that majority of the current contraceptive users in Kenya, (40.2 per cent) took at least 60 minutes to reach the nearest source of contraceptive services. In KDHS, (1989) 45 per cent of the women took 30-60 minutes while a sizeable proportion of 31 per cent took 15-30 minutes to a family planning source. Variations in the results found in this study and those of other studies is due to the different areas of study used.

Information on travelling time to the clinics presented in Table 4.8b above shows that this variable is not associated with clients' satisfaction. Many of the clients do not spend much time, yet they are dissatisfied with the services provided in the clinics. This shows lack of association between travelling time and clients' satisfaction with the services which supports the X^2 results. Dissatisfaction of clients might be caused by other factors. Therefore, the hypothesis formulated in chapter two that there is an association is rejected.

travelling time can further be explained in relation to the mode of transportation used by the clients. The most frequently reported travelling means was on foot by 50.6 per cent, compared to 45 per cent of the urban women in KCPS, (1984). 42.9 and 6.8 per cent of the clients use public and private means respectively. From the KDHS, (1989) results, 2/3 of the women walk to the source of Family Planning.

4.2.4 TRAVELLING COST AND CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

Travelling cost is an expense incurred in travel to Family Planning Clinics. Cost is related to distance and travelling time used (Maine, 1981). Results on clients' residence show that most of them live in Nairobi. Therefore, they spend less money on travel.

When travelling cost was subjected to a X^2 test, it was found that the tabulated X^2 at 3 degrees of freedom and at 0.05 significance level is 7.815, while the calculated X^2 is 6.540. The tested is given below:-

H₀ : There is no significant relationship between travelling cost to Family Planning Clinics and clients' satisfaction with Family Planning Services.

Therefore, we accept H_0 and reject the alternative hypothesis (H_1) given below because the calculated X^2 is less than the tabulated.

H_1 : There is a significant association between travelling cost to Family Planning Clinics and clients' satisfaction with Family Planning Services.

The variable was also tested at 0.010 level of significance to show whether an association with clients' satisfaction exists. The tabulated X^2 at 3 degrees of freedom is 6.251. Since the calculated X^2 (6.540) is less than the tabulated. Here, the variable is significant, but the association is weak. Therefore, the association is not as close as was hypothesised in chapter two.

Table 4.9b below shows the observed and expected frequencies of respondents according to travel cost to the clinics.

TABLE 4.9b THE OBSERVED AND EXPECTED FREQUENCIES OF TRAVELLING COST TO FAMILY PLANNING CLINICS ACCORDING TO CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

SATISFIED	FREQUENCIES				TOTAL
	WALK (0)	2 - 10	10 - 20	OVER 20	
SATISFIED	47 (56.1)	50 (41.9)	7 (6.3)	7 (6.6)	111
DISSATISFIED	139 (129.9)	89 (97.1)	14 (14.7)	21 (15.4)	257
TOTAL	186	139	21	22	368

It is of interest to note that over a half (50.6 per cent) of the clients do not spend any money in travel to the clinics. From this total, 37.8 per cent were dissatisfied, while 12.8 per cent were satisfied. This shows that inspite of clients having incurred no travel cost, a big proportion was still dissatisfied. 37.7 per cent of the clients spend between 2-10 KShs. From this figure, 24.2 per cent were dissatisfied while 13.5 per cent were satisfied. Only 5.8 per cent of the respondents reported an expenditure of 11-20 KShs. From this figure, 3.8 per cent were satisfied, while 1.9 per cent reported that they were dissatisfied. Lastly, 5.9 per cent of the clients reported the highest expenditure on travel of over 20 KShs. While 4.0 per cent of them were dissatisfied, only 1.9 per cent reported that they were satisfied. All this is illustrated in Table 4.10b below and in figure 10.

TABLE 4.10b THE DISTRIBUTION OF TRAVELLING COST TO FAMILY PLANNING CLINICS ACCORDING TO CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

SATISFACTION	FREQUENCIES					PERCENTAGES				
	TRAVELLING COST IN KSHS.					TRAVELLING COST IN KSHS				
	WALK (0)	2 - 10	10 - 20	OVER 20	TOTAL	WALK (0)	2 - 10	10 - 20	OVER 20	TOTAL
SATISFIED	47	50	7	7	111	12.8	13.5	2.0	1.9	30.2
DISSATISFIED	139	89	14	15	257	37.8	24.2	3.8	4.0	69.8
TOTAL	186	139	21	22	368	50.6	37.7	5.8	5.9	100.0

THE DISTRIBUTION OF CLIENTS BY TRAVELLING COST TO FP CLINICS

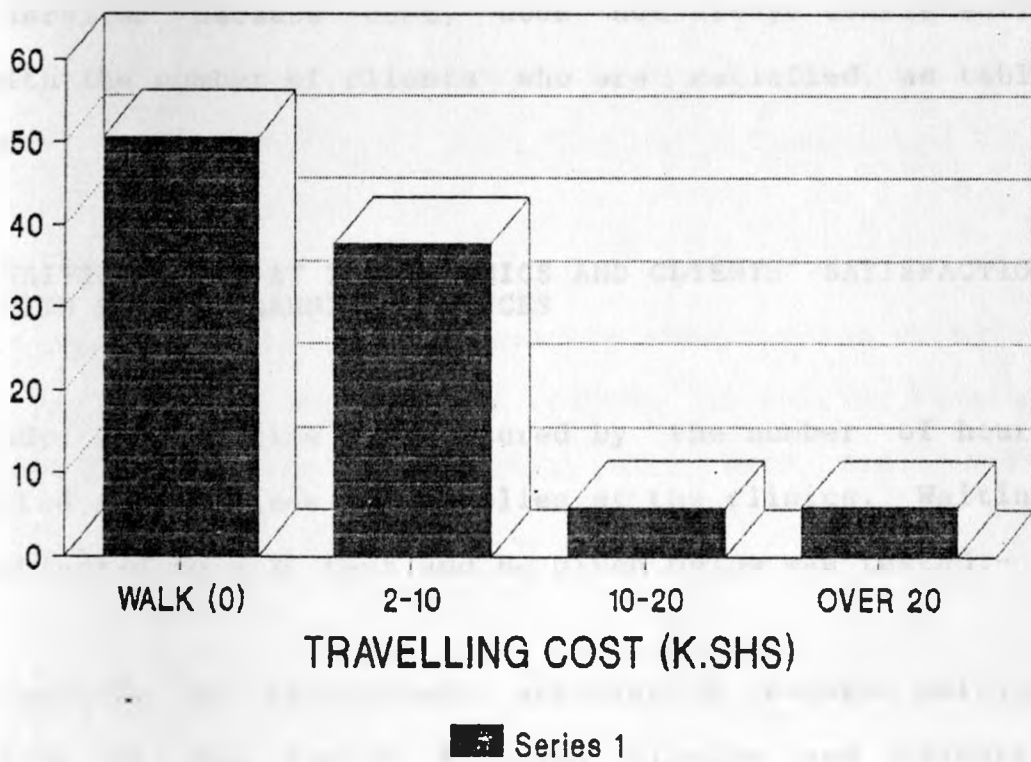


Figure 10

The Nairobi City Commission has provided Family Planning Services in clinics near residential estates. This explains why many clients in Public Clinics (who form the bulk of clients) walk there. However, Private Clinics under study are located in or near the city centre where there are few residential buildings, thus many clients cannot walk to these clinics and they incur a higher travel cost.

The percentage distribution of clients under study by travelling cost support the χ^2 results that there is only a weak association between travelling cost and clients' satisfaction with Family Planning Services because cost, does not always consistently increase with the number of clients who are satisfied, as table 4.10b shows.

4.2.5 WAITING TIME AT THE CLINICS AND CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

In this study, waiting time was measured by the number of hours clients waited for services and supplies at the clinics. Waiting time was subjected to a χ^2 test and H_0 given below was tested:-

H_0 : There is no significant association between waiting time at the Family Planning Clinics and clients' satisfaction with Family Planning Services.

This hypothesis was tested at 0.05 level of significance and the following results were found.

The tabulated X^2 at 2 degree of freedom is 5991, while the calculated X^2 is 6.898. This shows that the calculated X^2 is greater than the tabulated or the X^2 critical. Therefore, we reject the H_0 and accept the H_1 which states:-

H_1 : There is a significant relationship between waiting time at the Family Planning Clinics and clients' satisfaction with Family Planning Services.

The variable is significant, therefore, the hypothesis formulated in chapter two that clients' satisfaction is associated with prolonged waiting time is accepted.

The contingency Table 4.11b below shows the observed and expected frequencies of the respondents with respect to waiting time at the Family Planning Clinics in Nairobi, that were used in X^2 test.

TABLE 4.11b THE OBSERVED AND EXPECTED FREQUENCIES OF WAITING TIME AT FAMILY PLANNING CLINICS ACCORDING TO CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

SATISFACTION	TIME SPENT AT THE CLINICS IN HOURS			TOTAL
	LESS THAN 1	1 - 2	OVER 2	
SATISFIED	14 (21.7)	48 (44.6)	49 (44.7)	111
DISSATISFIED	58 (50.3)	100 (103.4)	99 (103.3)	257
TOTAL	72	148	148	368

Table 4.12 below illustrates the frequencies and percentage distribution of clients according to waiting time spent since entry to and exit from the clinic. The largest category of clients, 40.2 per cent spent between 1½ to 2¼ hours, followed by those who spent 2¼ to 3¼ hours (25.8 per cent). Only 4.3 per cent of them spent less than half an hour, while 15.2 per cent spent between ¼ - 1¼ hours respectively. Lastly, 2.4 per cent spent over 5 hours at the clinics.

Those who spent less than 1 hour were 19.6 per cent. Of this total, 15.8 were dissatisfied while 3.8 per cent were satisfied. 40.2 per cent spent between 1-2 hours of this total, 27.2 per cent were dissatisfied while 13.0 per cent were satisfied with the services. Of these, 13.3 per cent were satisfied, but more than double the number (26.9 per cent were dissatisfied with the services. The average waiting time was 2.39 hours. In

comparison to other researchers, Dow (1981) found that in Kenya, family Planning clinics, the waiting time was 1.82 hours compared to the study they carried out on rural women in Kenya where they found a mean waiting time of 1.80 hours and a mode of 1.00 hours (Dow and Werner, 1982). However, since these studies were carried out, the number of clients in the clinics has increased, hence a heavier workload for clinic staff and consequently a longer waiting time for the clients.

TABLE 4.12b THE DISTRIBUTION OF WAITING TIME AT THE CLINICS ACCORDING TO CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

SATISFACTION	FREQUENCIES OF			TOTAL	PERCENTAGE WAITING			TOTAL
	WAITING TIME IN HOURS				TIME IN HOURS			
	< 1	1 - 2	OVER 2		< 1	1 - 2	OVER 2	
SATISFIED	14	48	49	111	3.8	13.1	13.3	30.2
DISSATISFIED	58	100	99	257	15.8	27.2	26.8	69.8
TOTAL	72	148	148	368	19.6	40.3	34.2	100.0

These figures show that waiting time is associated with clients' satisfaction with Family Planning Services. The hypothesis that clients' satisfaction with Family Planning services is associated to prolonged waiting time is acceptable.

4.2.6 TOTAL TIME SPENT BOTH IN TRAVEL AND WAITING AT THE CLINIC.

The information concerning total time was recorded in number of hours spent by a client in travel to the clinic and to wait for services at the clinic. Time was put in three categories and the results were put in an ascending order as shown in Table 4.13b below.

TABLE 4.13b THE DISTRIBUTION OF TOTAL TIME SPENT IN TRAVEL AND WAITING AT THE CLINICS

TOTAL TIME IN HOURS	FREQUENCY	PERCENTAGE
< 2	46	12.5
2 - 4	271	73.6
OVER 4	51	13.9
TOTAL	368	100.0

Of the 368 clients interviewed, only one eighth (12.5 per cent) spent less than 2 hours in travel and in waiting at the clinics. Almost three quarters of them (73.6 per cent) spent between 2 - 4 hours, while 13.9 per cent over 4 hours. These results revealed a mean total time of 3.014 and a mode of 3.000 hours. The figures given above show that a long time is spent in travel and in getting family planning services in Nairobi, which is bound to reduce clients' satisfaction with services.

4.2.7 MOTIVATION AND CLIENT'S SATISFACTION WITH FAMILY PLANNING SERVICES

Through motivation, knowledge is imparted to clients on the choice and switch from one method to another, (Bruce, 1989). Various ways are used by the clinic management to motivate clients to use family planning methods. These range from lectures given in clinics, provision of reading materials, tangible incentives to home-visits by clinic staff.

5.4 per cent of the clients reported that they had been given lectures, 12.2 per cent had been provided with reading materials. Only 0.3 per cent had been given tangible incentives while 1.7 per cent had had home visits from clinic staff. Lastly, 0.3 per cent of the clients reported that other activation means had been used for them. These results are presented in Table 4.14b below.

TABLE 4.14b THE DISTRIBUTION OF VARIOUS MOTIVATION MEANS USED BY CLINIC STAFF

MOTIVATION MEANS	FREQUENCY	PERCENTAGE
None	296	80.4
Lectures	20	5.4
Reading Materials	45	12.2
Tangible incentives	1	0.3
Home-visits by clinic staff	5	1.7
Other ways	1	0.3
TOTAL	368	100.0

Motivation of clients by clinic staff was subjected to X^2 test in order to establish whether this explanatory variable is significant. H_0 to be tested states:-

H_0 = There is no significant association between motivation and clients' satisfaction with Family Planning services.

This hypothesis was tested at 0.05 level of significance and the following results were found at 1 degree of freedom.

The calculated X^2 at one degree of freedom is 6.323, while the X^2 critical (tabulated) is 3.841. This means that the calculated X^2 is greater than the X^2 critical. Therefore, we reject H_0 and accept H_1 which states:-

H_1 = There is a significant association between motivation and clients' satisfaction with Family Planning Services.

This shows that motivation of clients by clinic staff is important as regards clients' satisfaction with Family Planning Services. Therefore, the hypothesis Motivated clients are likely to be satisfied with Family Planning services formulated in chapter two is accepted.

The contingency Table 4.14b below shows the observed and expected frequencies of respondents with respect to motivation of clients by clinic staff that were used in X² test.

TABLE 4.15b THE OBSERVED AND EXPECTED FREQUENCIES OF MOTIVATION ACCORDING TO CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

SATISFACTION	F R E Q U E N C I E S		TOTAL
	MOTIVATED	NOT MOTIVATED	
SATISFIED	31 (21.7)	80 (89.3)	111
DISSATISFIED	41 (50.3)	216 (206.7)	257
TOTAL	72	296	368

In the present study, 80.4 per cent of the clients reported that they were not motivated, the rest 19.6 per cent were motivated. Out of those who were not motivated clients, 21.7 and 58.7 per cent were satisfied and dissatisfied respectively, compared to 3.5 and 11.1 per cent of those who were motivated were satisfied and dissatisfied respectively as shown in Table 4.16b below. These results confirm the findings of Novak et, al, (1983) who found that motivated clients understate, other factors to obtain a Family Planning Product or services.

TABLE 4.16b MOTIVATION ACCORDING TO CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

SATISFACTION	FREQUENCIES		TOTAL	PERCENTAGES		TOTAL
	MOTIVATED	NOT MOTIVATED		MOTIVATED	NOT MOTIVATED	
DISSATISFIED	31	80	111	8.5	21.7	30.2
SATISFIED	41	216	257	11.1	58.7	69.8
TOTAL	72	296	368	19.6	80.4	100.0

Over a half (58.7 per cent) of the clients were not motivated, but they are dissatisfied, however, 8.5 per cent of the clients are motivated yet they are satisfied. This shows that percentage distribution results consistently support the χ^2 results. This shows the significance of motivation in relation to satisfaction with Family Planning Services. The continued use of the services inspite of lack of motivation can partly be explained by the high educational level of clients hence high contraceptive knowledge (Ikamari, 1985; Mungai, 1986).

4.2.8 STAFF/CLIENT INTERACTION AND CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

Social relations between clients and clinic staff are associated with clients' satisfaction with Family Planning Services. Good relations ensure a high probability of a return visit and

therefore, a continued use (Immerwahr, 1981). An association between Staff/client interaction and clients' satisfaction with Family Planning Services exists. The H_0 under test states:-

H_0 = There is no significant association between staff/client interaction and clients' satisfaction with Family Planning Services.

This hypothesis was tested at 0.05 level of significance. The calculated χ^2 is 12.080 while the tabulated at 1 degree of freedom is 3.841. This makes us reject the H_0 because the calculated χ^2 is greater than the tabulated, and accept it, which states:-

H_1 = There is a significant association between staff/client interaction and clients' satisfaction with Family Planning Services.

Therefore, staff/client interaction is associated with clients' satisfaction with family planning services. This means that the variable is significant and that the hypothesis formulated in chapter two, that "there is an association between staff/client interaction and clients' satisfaction with Family Planning Services is acceptable.

The table 4.17b below shows the observed and expected frequencies of staff/client interaction used in X^2 test.

TABLE 4.17b THE OBSERVED AND EXPECTED FREQUENCIES OF STAFF/CLIENT INTERACTION ACCORDING TO CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

	FREQUENCIES STAFF/CLIENT INTERACTION		
	HAPPY	UNHAPPY	
SATISFIED	28 (16.6)	83 (94.4)	111
DISSATISFIED	27 (38.4)	230 (218.6)	257
TOTAL	55	313	368

Percentage results found in this study are given in table 4.18b below which shows that the largest percentage (85.1%) was in the category of clients who reported that they were unhappy with the staff with whom they relate with in the clinics. Of these, 22.6 per cent were satisfied while 62.5 per cent were dissatisfied with the services. This shows that staff/client interaction plays a part in dissatisfying or satisfying the clients. Only 14.9 per cent of the clients indicated that they were happy with their interaction with clinic staff. However, 7.3 per cent of these were dissatisfied while 7.6 per cent were satisfied with the services provided. These results confirm the findings of Bruce (1989) who found that client/provider relations contribute

towards clients' satisfaction and assurance of a continued use of contraceptives.

TABLE 4.18b STAFF/CLIENT INTERACTION ACCORDING TO CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

SECTION	FREQUENCIES		TOTAL	PERCENTAGES		TOTAL
	STAFF/CLIENT INTERACTION			STAFF/CLIENT INTERACTION		
	HAPPY	UNHAPPY		HAPPY	UNHAPPY	
DISFIED	28	83	111	7.6	22.6	30.2
SATISFIED	27	230	257	7.3	62.5	69.8
	55	313	368	14.9	85.1	100.0

To further explain staff/client interaction at the clinics, clients were asked what makes them unhappy about this interaction. 14.9 per cent of them reported that they were happy with the interaction. However, 13.3 per cent were unhappy due to the impersonal nature of the staff towards them. The largest proportion of clients (51.9 per cent) were unhappy due to the prolonged waiting time. As observed in section 3.2.3, clients are very sensitive to prolonged waiting time, which contributed to their dissatisfaction. 17.9 per cent of the clients were unhappy due to the rudeness of the staff. Only 1.9 per cent of the clients were unhappy due to other reasons e.g. age difference of clients and staff or the inadequate training the staff might

have received in respect to dealing with clients. Reasons for clients being unhappy with their interaction with clinic staff is presented in Table 4.19b below.

TABLE 4.19b THE REASONS THAT MAKE CLIENTS UNHAPPY WITH THEIR INTERACTION WITH CLINIC STAFF

REASONS FOR BEING UNHAPPY	FREQUENCY	PERCENTAGE
None	55	14.9
Impersonal nature of staff	49	13.3
Prolonged waiting time	191	51.9
Rudeness	66	18.0
Other	7	1.9
TOTAL	368	100.0

4.2.9 AVAILABILITY OF PREFERRED METHOD AND CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

Availability of preferred method help clients in their choice of the method to use. If a variety of methods are not provided, this reduces clients' satisfaction (Cairo Demographic Centre, 1983). The methods provided reflect users needs or their reproductive intentions (Bruce, 1989) and provide for switching among methods (Mundigo, 1973).

In this study, it was assumed that, "Availability of preferred method of contraception is associated with clients' satisfaction with family planning services." This was tested using the X^2 test. H_0 is given below:-

H_0 = There is no significant association between availability of preferred method and clients satisfaction with Family Planning Services.

The observed and expected frequencies of availability of preferred method with respect to clients' satisfaction with Family Planning Services are shown in Table 4.20b below.

TABLE 4.20b THE OBSERVED AND EXPECTED FREQUENCIES OF AVAILABILITY OF PREFERRED METHOD ACCORDING TO CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

	FREQUENCIES AVAILABILITY OF PREFERRED METHOD		
	AVAILABLE	NOT AVAILABLE	
SATISFIED	95 (100.7)	16 (10.3)	111
DISSATISFIED	239 (233.3)	18 (23.7)	257
TOTAL	334	34	368

From the computations of preferred method, the calculated value of the X^2 is 4.231, while the X^2 critical (tabulated) at 1 degree of freedom is 3.841 at 0.05 level of significance. Since the calculated value of X^2 is greater than the critical value, then H_0 is rejected and H_1 stated below accepted.

H₁ = There is a significant association between availability of preferred method and clients' satisfaction with Family Planning Services.

Table 4.21 below shows the percentage distribution of clients according to the method they preferred. 90.8 per cent of them reported that the method they preferred was always available. Of this total, 65.0 per cent were dissatisfied while 25.8 per cent were satisfied. Only 9.2 per cent reported that the method they preferred was not always available. Of this total 4.3 per cent were satisfied, while 4.9 per cent were not.

TABLE 4.21b AVAILABILITY OF PREFERRED METHOD ACCORDING TO CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

SATISFACTION	FREQUENCIES		TOTAL	PERCENTAGES		TOTAL
	AVAILABILITY OF PRE-METHOD			AVAILABILITY OF PRE-METHOD		
	AVAILABLE	NOT AVAILABLE		AVAILABLE	NOT AVAILABLE	
SATISFIED	95	16	111	25.8	4.4	30.2
DISSATISFIED	239	18	257	65.0	4.8	69.8
TOTAL	334	34	368	90.3	9.2	100.0

Although the variable was found to be significant when subjected to a X² test, a large number of clients (65.0 per cent) were dissatisfied and reported that the method preferred was

available. May be, their dissatisfaction was as a result of other factors. The percentages do not consistently support the χ^2 test.

These results can be compared with the KCPS (1984) results where only 0.6 per cent of the respondents reported that the method they preferred was not always available. The increased number of the respondents reporting that the method was not available in the present study can be explained by the increased number of clients at the clinics today, which implies an increased demand.

To explain availability of preferred method further, clients were asked why they switched from one method to another. The Table 4.22b below shows that 60.9 per cent of the respondents had not changed the method since they started using contraceptives, but 39.1 per cent had done so due to various reasons. The highest proportion had switched methods due to medical reasons (24.2 per cent) followed by those who reported that they had personal reasons, for example pressure from husbands (12.0 per cent). 1.4 per cent did so due to financial reasons while 1.6 per cent were forced by non-availability of preferred method.

TABLE 4.22b THE PERCENTAGE DISTRIBUTION OF REASONS FOR CHANGE TO CURRENT METHOD

REASONS FOR CHANGE	FREQUENCY	PERCENTAGE
None	224	60.9
Method not available	6	1.6
Financial	5	1.4
Medical	89	24.2
Other	44	12.0
TOTAL	368	100.0

4.2.10 CLIENTS' HEALTH AFTER ADOPTION OF CONTRACEPTION AND CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

Poor health of clients after adoption of contraception discourages regular use, (Cairo, Demographic Center, 1983, Bulatao, 1983). Clients who are desperate to control their fertility will tolerate almost any type of contraception including accepting methods that are incompatible with their health or that are life threatening (Bruce 1989). However, in Kenya clients are given information on health risks (Mungai, 1986).

The results of the health of client after adoption of contraception obtained in this study were subjected to a X^2 test. In chapter two, the health of client after adoption of contraception was hypothesized to be associated with clients' satisfaction with Family Planning Services. Sullivan et al,

(1976) had confirmed that clients do suffer some illness as a result of contraception. Ho used in the X² test states:-

Ho = There is no significant association between the health of clients after adoption of contraception and satisfaction of client with Family Planning services.

The observed and expected frequencies of clients' health after adoption of contraception according to clients' satisfaction with Family Planning services are presented in Table 4.23b below.

TABLE 4.23b THE OBSERVED AND EXPECTED FREQUENCIES OF THE HEALTH OF CLIENT AFTER ADOPTION OF CONTRACEPTION ACCORDING TO CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES.

SATISFACTION	FREQUENCIES HEALTH OF CLIENT AFTER ADOPTION OF CONTRACEPTION		TOTAL
	HAD HAD HEALTH PROBLEM	HAD HAD NO HEALTH PROBLEM	
	SATISFIED	39 (40.1)	
DISSATISFIED	94 (92.9)	163 (164.1)	257
TOTAL	133	235	368

The results of this variable show that the calculated value of X^2 is 0.021. The value of X^2 tabulated at 1 degree of freedom and at 0.05 level of significance is 3.841. From these findings, we accept H_0 and reject H_1 because the calculated X^2 is less than the tabulated.

The variable was also tested at 0.010 level of significance at 1 degree of freedom. The tabulated X^2 is 1.642 which is still more than the calculated. Therefore, the variable is not significant in relation to clients' satisfaction with Family Planning.

The hypothesis formulated in chapter two that an association exists between clients' health after adoption of contraception and clients' satisfaction with family planning services is also rejected.

In this study, clients who were interviewed were asked whether they had had any health problems since they adopted contraception. From their responses, 36.1 per cent of the clients had had health problems, while 63.9 per cent had had no problem. Of those who had problems, 10.6 per cent were still satisfied with the services, while 25.5 per cent of them were dissatisfied. Of those who had had no problems, only 19.6 per cent were satisfied, while 44.3 per cent were dissatisfied with the services. These figures are presented in Table 4.24b below,

and they support the results of X^2 test may be, the high percentage of clients who have had no health problems can generally be explained by the good services provided in Nairobi (Rogo, 1988).

TABLE 4.24b CLIENTS' HEALTH AFTER ADOPTION OF CONTRACEPTION ACCORDING TO CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES

SATISFACTION	FREQUENCIES		TOTAL	PERCENTAGES		TOTAL
	HEALTH OF CLIENT AFTER CONTRACEPTION ADOPTION			HEALTH OF CLIENT AFTER CONTRACEPTION ADOPTION		
	HAD HAD HEALTH PROBLEM	HAD HAD NO HEALTH PROBLEM		HAD HAD HEALTH PROBLEM	HAD HAD NO HEALTH PROBLEM	
SATISFIED	39	72	111	10.6	19.6	30.2
DISSATISFIED	91	163	257	25.5	44.3	69.8
TOTAL	133	235	368	36.1	63.9	100.0

A number of past studies show almost similar results e.g. in their study of Jokorto in Indonesia, Sullivan, et al, (1976) found that 24 per cent of contraceptive users terminated use due to side effects.

Those clients who had had health problems and were still satisfied shows that may be, they were too desperate to control their fertility. They tolerated any type of contraception

including methods that are incompatible with their health or even life threatening, for example, abortion or depo-provera.

related to health of client after adoption of contraception are the various and specific problems that clients faced. Table 4.25b below shows the frequency and percentage distribution of the specific problems they faced, which shows that most problems reported are inter-menstrual bleeding by 8.4 per cent. Headaches and backaches were reported by 4.4 and 5.4 per cent respectively. Dizziness had been experienced by 3.8 per cent, other problems are becoming pregnant while using a method by 2.5 per cent. Problems of contraceptive management was reported by 8.2 per cent of the clients.

TABLE 4.25b THE DISTRIBUTION OF THE MAIN PROBLEMS CLIENTS ENCOUNTERED AFTER ADOPTION OF CONTRACEPTION

MAIN PROBLEM AFTER ADOPTION OF CONTRACEPTION	FREQUENCY	PERCENTAGE
Inter-menstrual bleeding	31	8.4
Backaches	20	4.4
Headaches	16	5.4
Dizziness	13	3.5
Abdominal Pains	14	3.8
Became Pregnant in Use	9	2.5
Management	30	8.2
None	235	63.8
T O T A L	368	100.0

4.3.0 SUMMARY

The foregoing analysis of factors associated with clients' satisfaction with Family Planning Services in Nairobi has shown a number of things.

From the background characteristics of clients, it was clear that the bulk of them reside in Nairobi. This explains the relatively low travelling cost and time. Most of them are educated and earn a living, thus they are bound to be enlightened about good services that they would expect in the clinics, but many of them are dissatisfied.

The biggest proportion of clients are aged 25-29 generally most of them have low parities. With many reproductive years ahead of them many clients started contraception early and this has helped to keep their parities generally low.

The reasons given by clients why they changed from their previous sources of contraception to the present shows that besides the dissatisfying services provided in the clinics they currently visit, services in other clinics were also not good. There was prolonged waiting time, poor staff/client relations and distance as the main deterring reasons.

generally, clients had low parities at first contraception. This shows that many of them realized the need for contraception, early in reproductive life, therefore they had to tolerate the services provided although they were dissatisfied.

All the hypothesised associations formulated in chapter one were not confirmed. First, all the selected clinic based factors are associated with clients' satisfaction with Family Planning Services. The clinic factors that were subjected to X^2 tests were waiting time, motivation, staff/client interaction, availability of preferred method, and clinic type. They were all found to be significant in relation to clients' satisfaction with Family Planning Services (Table 3.1c). Therefore, there is need to ameliorate the clinic conditions if clients' satisfaction has to be enhanced. When clients were asked to suggest ways in which clinic services could be improved, 28.7 per cent suggested improvement through better appointment systems, 5.2 and 7.3 per cent through punctuality of staff and clients respectively. 12.1 per cent suggested other ways e.g. separation of MCH and Family Planning Services. But 33.6 per cent suggested that waiting time should be reduced. However, 8.2 per cent of the clients did not know any way in which the clinic services could be improved. Lastly 4.9 per cent of the clients did not respond. From these results, waiting time seems to be a major factor in causing clients' dissatisfaction which should be reduced.

secondly, in the accessibility factors, travelling time was not found to be significantly associated with clients' satisfaction with Family Planning Services (Table 3.1c). However, travelling cost had a weak association. This can be explained by the urban nature of the study where it is quicker and cheaper to travel to the clinics as shown in reviewed literature (e.g Dow and Werner, 1982).

The health of client after the adoption of contraception was also not found to be associated with clients' satisfaction with Family Planning Services (Table 3.1c). May be, the need to space, postpone, or stop child-bearing supercedes clients' satisfaction with Family Planning Services or concern with one's health.

Therefore, the conclusion is that the level of clients' satisfaction with Family Planning Services should be raised if clients are to continue using Family Planning Services in Nairobi for a long time.

TABLE 4.1C VARIABLES ASSOCIATED WITH CLIENTS' SATISFACTION WITH FAMILY PLANNING SERVICES TESTED AT 0.05 SIGNIFICANCE LEVEL.

VARIABLES	CHI-SQUARE		REJECT/ACCEPT
	TABLE VALUE	CALCULATED VALUE	
Travelling time in hours classified into:- - Less than 1 hour - 1-2 hours - Over 2 hours	5.991	2.060	REJECT
Travelling cost in KShs. classified into:- - Walking (0 KShs.) - 2 - 10 - 11-20 KShs. - Over 20 Kshs.	6.251	2.130	REJECT
Waiting time in hours classified into:- - Less than 1 hour - 1-2 hours - Over 2 hours	5.991	6.898	ACCEPT
Motivation classified into:- - Motivated - Not Motivated	3.841	6.323	ACCEPT
Staff/Client Interaction classified into:- - Happy interaction - Unhappy interaction	3.841	12.080	ACCEPT
Availability of Preferred Method classified into:- - Available - Not Available	3.841	4.231	ACCEPT
Clinic Type classified into:- - Public - Private	3.841	6.631	ACCEPT
Health of Client after Adoption of Contraception classified into:- Had had health problems Had had no health problems	3.841	0.021	REJECT

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0.0 INTRODUCTION

This chapter deals with the summary of the findings, conclusions and recommendations.

The study set out to achieve some objectives. In this chapter, an attempt was made to show how far these objectives were achieved by first of all presenting the summary of the major findings with reference to the hypotheses formulated in chapter one. Secondly by showing the conclusions reached by the study. Thirdly, the impact of these finding on policy development are shown, and lastly, general recommendations and recommendations for further research arising from the study are put forward.

The chapter is divided into four sections. The summary and conclusions drawn from the findings are presented in section 5.0.1 and 5.0.2 below. Also outlined are recommendations pertinent to policy-making in section 5.0.3, while recommendation on areas for further research related to clients' satisfaction with Family Planning Services are given in section 5.0.4.

5.0.1 SUMMARY OF FINDINGS:

The attention of this study is focussed on those who have gained access to Family Planning Services.

The study's overall objective as set out in chapter one was to examine the factors associated with clients' satisfaction with Family Planning Services in Nairobi. These factors are grouped into accessibility, clinic-based and clients' factors. This general objective was related to all hypotheses tested in this study.

The other objectives were to find out clients' satisfaction level with Family Planning Services and to determine the associations between variables under study and clients' satisfaction with Family Planning Services. In relation to the former objective it was hypothesised that Private Clinics are likely to have more satisfied clients than public clinics. This hypothesis was verified because, a larger percentage (75) of dissatisfied clients was found in public clinics than in private ones (62 per cent). For the latter objectives, it was hypothesized that there is an association between the variables under study and clients' satisfaction with Family Planning Services.

All the hypothesized association in this study were not confirmed by the findings. The study failed to find evidence that all the variables studied were associated with clients' satisfaction with Family Planning Services.

Travelling time and health of clients after adoption of contraception were not significant at 0.05 and 0.010 levels of significance because most client (86.7 per cent) live in Nairobi and need to contraceptive supercede their health respectively. Travelling cost was only found to be significant at 0.010 level of significance which shows that the variable has a weak association with clients' satisfaction with Family Planning Services because a big number of clients 50.6 per cent walk to the clinics. Results from earlier studies, (Chen et. Al, (1983); Parter, (1984) found that long time used in travel to the clinics discouraged many clients, while Maine (1981) found that high transportation cost discourages many clients.

Variables that were found to be significant were, waiting time, motivation, staff/client interaction, availability of preferred method and clinic type. The finding of earlier studies are confirmed by most of these findings. In a study of Java-Bali region in Indonesia, Soerdji, et. al (1982) found that long waiting time at the clinics depresses clients' satisfaction with the services. Novak et. al. (1983) found that motivated clients

understate distance or travel time to obtain a Family Planning Services, or product. Bruce (1989) found that in Latin America, good staff/client interaction where clients were at ease with staff resulted in higher satisfaction of clients. She like Jain, (1988) found that contraception dispensation tailored to particular needs and reproductive intentions of clients raises satisfaction level of clients.

Of all the clients studied, only 30.2 per cent were satisfied while 69.8 per cent were dissatisfied with Family Planning Services.

5.0.2 CONCLUSIONS

One conclusion reached is that many variable are associated with clients satisfaction with Family Planning Services. As stated in chapter two the main objective was to examine association variable under study and clients' satisfaction with Family Planning Services. When subjected to the X^2 test, five of the eight selected explanatory variables were found to be significantly associated with clients with clients satisfaction with the services. One variable had a weak association.

Family Planning Services are more accessible in urban areas where there are more services points (Peng, 1981). In this urban-based study, time and expense to travel to Family Planning Clinics are not significantly associated with clients' satisfaction with Family Planning Services. This is because family planning services are more accessible in urban areas where there are more service points (Peng, 1981). The hypothesis that "high travelling cost is closely associated with clients' satisfaction with Family Planning Services" is acceptable, but the hypothesis that less travelling time is associated with client' satisfaction with services is negated.

It was found that clients have to wait for services and supplies for a long time at the clinics. Waiting time was found to be significant. This shows that it has a depressing effect on clients' satisfaction with Family Planning Services. The hypothesis that, "client' satisfaction with Family Planning Services is not associated with prolonged waiting time" is confirmed.

It was also found that availability of preferred method was associated with clients' satisfaction with Family Planning Services. There were variety of methods catering for those who are either spacers or limiters and to assist clients in switching easily among available methods. However, some women reported

that they were frustrated when they wanted specific methods that were not available. Therefore, the hypothesis that "Availability of preferred method of contraception is highly associated with clients' satisfaction with Family Planning Services" is acceptable.

Positive relations between staff and clients are necessary to ensure continued contraceptive use. Interaction between staff and clients depend on many factors like nurses' professional ability as well as time pressure. Some of the clients were not happy with the treatment they received from the staff. Although some nurses were unfriendly, other were very caring and understanding which makes their clients feel confident with them and be satisfied with services. This confirms the hypothesis formulated in chapter two that, there exists an association between good staff/client interaction and clients' satisfaction with Family Planning Services. Generally, most staff are trusted, respected and held with high esteem even when they have little time for clients who follow the advice they have given them.

Some Family Planning Clinics give lectures more or less regularly soon after clinics are opened in the morning as part of motivation. This is convenient because a large number of clients are present then. Lectures mostly concentrate on one subject.

However, some clinics do not give lectures at all. Lectures are normally given by the community - based distributor (CBD) who also does some demonstration of Family Planning methods. Those are also demonstrated by the trained Family Planning nurses when individual counselling is also so done. Mostly, motivation is usually done in a hurry because the nurse is under much pressure due to other MCH activities. Teaching materials are seriously lacking except for some few posters. In some clinics, posters on Family Planning are torn.

Each of the city commission clinics has one trained Family Planning nurse and two or three field educators (CBD). The latter constitute an important group which has close contact with Family Planning users in their homes because one of their main activities is home-visiting as part of motivation. In FPAK clinics, and at the University of Nairobi clinic, motivation is done at the clinics only.

On the whole, the above information shows that motivation provided is not fully adequate, clients should be well informed in order to continue using contraceptives through formal mechanisms. But some of the clinic staff are perceived as being totally ineffective in their explanations to enable clients to make proper choices.

However, the variable as originally hypothesized was found to be significantly associated with clients' satisfaction with Family Planning Services. Therefore, the hypothesis formulated in chapter two that, "motivated clients are likely to be satisfied with Family Planning Services" can be accepted.

In this study, the health of clients after adoption of contraception was found to be insignificantly associated with clients' satisfaction with Family Planning Services. Therefore, the hypothesis that, "The health of clients after adoption of contraception is associated with clients' satisfaction with Family Planning Services," is rejected.

It is of importance to note that only 30.2 per cent of the clients studied were satisfied, while the majority (69.8 per cent) were found to be dissatisfied with the Family Planning Services in Nairobi. However, they have not discontinued using these services. This might be due to the more pressing need to space, limit or stop child bearing which supercedes satisfaction with the services. Therefore improvement in the quality of services will result in a large more committed clientele of satisfied contraceptive users, high contraceptive prevalence and ultimate reduction in fertility.

5.0.3 RECOMMENDATIONS PERTINENT TO POLICY MAKERS

Certain policy implications are clearly discernible from this study which might be useful to future policy-makers. This study has shown that most of the clients are not satisfied with Family Planning Services provided in Nairobi, yet such high rates of dissatisfaction must be reduced not only for Nairobi, but also for the whole country if more women are to continue using Family Planning Services for a long time. This can be done through improving accessibility, clinic-based and clients' factors affecting clients' satisfaction with Family Planning Services. For this to be achieved, this study makes the following recommendations.

1. The cost required to expand the currently clinic-based contraceptive delivery system is prohibitively expensive as learnt from the clinic staff. Non-clinical delivery systems such as the CBD system, mobile clinics and commercial distribution systems should be further developed. This can considerably reduce service delivery costs and alleviate some of the constraints facing clients under the current clinic-based distribution systems. Such constraints are like losing time from work, long waiting hours at the clinics, and administrative bottlenecks. Above all stationary clinic facilities are limited in their ability to

serve many people. Secondly, at the clinics Family Planning Services receive second priority to the more immediate needs for curative health care (George Washington University Medical Centre, 1975). The suggested service delivery systems can be used for distributing oral contraceptives, condoms and foaming tablets with referrals to the clinics for IUDs, Injectables, sterilizations and other surgical contraception.

The clinic management should aim at reducing waiting time at the clinics. This can be done by installing a system that assures clients of being taken systematically, and through better appointment systems and efficient client flow with definite entry and exit points at the clinics. This is because failure to serve clients in a systematic order is a common problem which increases average waiting time for all clients and reduces efficient use of staff-members' time. Most clients spend most of their clinic visit waiting because they are asked to arrive at the same time resulting in long waiting periods for the clients, crowded waiting rooms, frustrated staff who feel rushed because of the large number of waiting clients. Therefore, a smooth client flow is a basic requirement to make the best use of staff members time skills and also to keep to a minimum clients'

waiting time at the clinic. Otherwise this limits the effectiveness of the clinic program which causes clients' dissatisfaction with the services.

3. The frequency of the follow-ups especially through home-visits should be increased as part of motivation. They should be integrated with those of other purposes like the health status for both adults and children. They should be recorded in order to know how often they are carried out.

This study found that not all clinics have regular and organized motivation methods which dissatisfies some clients.

The manpower at the clinics should be improved (service-providers) so that they are adequate in quality and to ensure that there is a balance between clients' service requirements and staffs' skills. There is need to further train them through in-service courses especially Family Planning counselling and interpersonal communication skills. In some clinics under study, it was found that some nurses lacked adequate knowledge on the contraceptive methods provided in the clinics. Besides this, the workload at the service delivery points is too heavy for the existing staff as evidenced by the long queues in some clinics. The

staff/client ration is too high. There is need to increase their number if clients' satisfaction level is to be raised.

5. The physical structure of most Family Planning facilities are squeezed with hardly enough space for clients examination or counselling. Mostly, Family Planning clients are mixed with other MCH clients especially in city council clinics, because from the early start, Family Planning had been integrated as part of MCH services provided in the same premises. Compared with the number of clients for other services, Family Planning with its limited number of clients takes only a small fraction of MCH total time. No special efforts have been made to establish favourable conditions specifically for Family Planning clients. As a result, majority of Family Planning nurses and their clients are faced with unfavourable conditions without much privacy which is necessary if clients are to be motivated to continue using Family Planning.

5.0.4. RECOMMENDATIONS FOR FURTHER RESEARCH

This study revealed several areas which need further investigation. A few suggestions are presented here below.

An accurate assessment of the magnitude of clients' satisfaction with Family Planning Services at regional and national levels lacking at the moment is required. Demographic surveys which often include questions on contraceptive use and continuation should be designed to include questions on clients' satisfaction on Family Planning Services. Details of the reasons for low satisfaction level of 30.3% as found in this study can be sought through such surveys.

Few studies have previously been undertaken under the rubric of clients' satisfaction with Family Planning Services. Therefore, its important contribution to contraceptive discontinuation has not been fully established. A study in this field would facilitate a better understanding of the basic problems of contraceptive continuation, and in better planning of future Family Planning Services for the country.

This study is concentrated on only a few variables that are associated with the present high level of client' dissatisfaction (69.8%) with Family Planning Services which are not exhaustive. There is need to investigate the role played by other factors omitted in this study like the effectiveness of Family Planning Personnel etc. Similar regional and national studies could be carried out to show the differentials in clients' satisfaction with Family Planning Services.

These could include studies in:-

- (a) Rural Family Planning Clinics
- (b) Clients of various socio-economic groups

These studies would help in establishing whether the high dissatisfaction level in this study was as a result of the highly urbanized sample that was studied.

The present study has examined current clients of Family Planning regardless of whether they use clinical or supply contraceptive method. Constraints of the users of these two methods are quite different. Clinical methods users might travel further than supply method users (Sullivan et, al., 1976) but they would only do it once or several time over a period of time, so that travel time and cost might not be such a constraint as would be for supply users who need to get supplies at regular intervals. However, factors affecting clients' satisfaction with the services for those supply or clinical methods need to be investigated.

As stated in the first chapter of this study, Family Planning Studies are quite recent and methods of analysis are being refined. The main methods of analysis in this study are percentage distribution and the X² test. The latter method is

wrought with a number of limitations among which is the inadequacy to test the strength of association and multicollinearity between the independent variable. The method cannot yield a full understanding of how these variables are interconnected. Therefore, researchers with additional techniques such as Log Linear Regression Analysis are needed.

There should be a study comparing clients still using and those who have discontinued using. Such a study can help in establishing what factors have satisfied or dissatisfied the continuers and discontinuers respectively. The above suggested areas of further research are not exhaustive and therefore, it is likely that other field of research will arise from this study which will help in making the existing Family Planning Program more meaningful to the clients, and that more appropriate and effective programmes can be designed.

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APPENDIX I

POPULATION STUDIES AND RESEARCH INSTITUTE
APPENDICES
UNIVERSITY OF NAIROBI

QUESTIONNAIRE

I am a student at the above named Institute carrying out a research on, "The Factors associated with Clients' Satisfaction with Family Planning Services. A study of some Family Planning Clinics in Nairobi."

I kindly request you to give answers for the questions below. Be assured that your responses will be treated as highly private and confidential. You are not required to sign your name.

Your prompt participation and cooperation are highly appreciated.

RESEARCHER: Jane K. J. Mwangi

APPENDIX I

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RESEARCHER: Jane W. J. Mwangi

RESPONDENTS BACKGROUND CHARACTERISTICS

- 001 Where do you live?
- 1. Nairobi
 - 2. Rural
 - 3. Visitor in Nairobi
 - 4. Other Towns
 - 5. Other (Specify)

- 002 What is your age in Years?
- 1. 15 - 19
 - 2. 20 - 24
 - 3. 25 - 29
 - 4. 30 - 34
 - 5. 35 - 39
 - 6. 40 - 44
 - 7. 45 - 50

- 003 Have you ever attended School?
- 1. Yes
 - 2. No

(Skip to Question 005)

004

What is the highest level of education that you completed?

- 1. Primary
- 2. Secondary
- 3. Higher
- 4. University
- 5. Other (Specify)

005

Can you read lets say, a Letter, a Newspaper, a Bible or a Koran in any Language?

- 1. Yes
- 2. No

006

Which is your Religion?

- 1. Catholic
- 2. Protestant/Other Christians
- 3. Muslim
- 4. No Religion
- 5. Other (Specify)

007

Are you currently working for a salary?

- 1. Yes
- 2. No

(Skip to Question 9)

How much do you earn per month (Kenya Shillings)?

- 1. Below - 1000
- 2. 1000 - 2999
- 3. 3000 - 4999
- 4. 5000 - 6999
- 5. 7000 - 8999
- 6. 9000 +

What is your marital status?

- 1. Single
- 2. Married
- 3. Widowed
- 4. Divorced
- 5. Separated

(Skip to Question 013)

Have you ever led a married life?

- 1. Yes
- 2. No

(Skip to Question 015)

In what month and year did you and your partner begin living together?

- 1. Year
- 2. Month

012 How old were you at that time? (Years)

013 Have you ever given birth?
1. Yes 2. No
(Skip to Question 021)

014 How many living children have you given birth to?
1. Sons (No) 2. Daughters (No)

015 How old were you at the birth of your first child?
1. 9 - 14 Years
2. 15 - 19 Years
3. 20 - 24 Years
4. 25 - 29 Years
5. 30 - 34 Years
6. 35 - 39 Years
7. 40 - 44 Years
8. 45 + Years

016 Would you like to have another child?
1. Yes 2. No
(Skip to Question 020)

017 How many more children would you like?
1. Boys (No) 2. Girls (No)

018

How many children would you like your daughter to have?

..... (Number)

019

Have any of your children died?

1. Yes 2. No

(Skip to Question 021)

020

Have you ever had a miscarriage/stillbirth?

1. Yes 2. No

(Skip to Question 023)

022

How many miscarriages and stillbirths have you ever had?

1. Miscarriages (Number)

2. Stillbirths (Number)

CONTRACEPTIVE USE

023

Have you ever obtained Family Planning supplies and services from any other source?

1. Yes 2. No

(Skip to Question 026)

024

Where was this?

- 1. Mobile Family Planning Clinic
- 2. Hospital/Dispensary
- 3. Family Planning Field Workers
- 4. Pharmacy/Shop
- 5. Private Doctor
- 6. Other (Specify)

025

What made you stop obtaining supplies and services from that source?

- 1. Poor Services
- 2. Bad Attitude of Staff
- 3. Distance
- 4. Lack of Supplies
- 5. Cost
- 6. Other (Specify)

026

For how long have you been visiting this clinic?

- 1. 0 - 6 Months
- 2. 6 - 11 Months
- 3. 1 - 2 Years
- 4. 2 - 4 Years
- 5. 5 + Years

027

How old were you when you first used a method to avoid having a baby?

..... Years

028

How many living children, if any, did you have at that time?

..... (Number)

029

How often do you visit the Family Planning Clinic?

- 1. Once a Month
- 2. Every 3 Months
- 3. Every 6 Months
- 4. Every 9 Months
- 5. Once a Year
- 6. Other (Specify)

030

How much time do you take from your residence to the clinic?

- 1. Less than half an Hour
- 2. Half - One Hour
- 3. One - Two Hours
- 4. Over Two Hours

031 How do you get to the clinic?

- 1. Walk
- 2. Use Public Means
- 3. Use Private Means
- 4. Other (Specify)

032 How much do you pay from your residence to the clinic?

- 1. 2 - 5 KShs.
- 2. 6 - 10 KShs.
- 3. 11 - 15 KShs.
- 4. 16 - 20 KShs.
- 5. 20 + KShs.

033 Family Planning Practice

Family Planning Type of Method	Ever Used Method	Current Use	Most Satisfied	Preferred
Pill (Oral Contraceptives)	:	:	:	:
I.U.D. (Coil)	:	:	:	:
Injections	:	:	:	:
Foam/Diaphragm/ Jelly/Condom	:	:	:	:
Female Sterili- sation (TL)	:	:	:	:
Norplant	:	:	:	:
Other (Specify)	:	:	:	:

(Skip to Question 036)

Why had you to change to the current method? (If desired?)

1. Method not available
2. Financial Reasons
3. Medical Reasons
4. Other (Specify)

For how long have you been using the Family Planning method continuously?

1. Years
2. Months

Have you had problems or difficulties with your present method?

1. Yes
2. No

What problems did you have?

1. Became pregnant while using the method
2. Inter-menstrual bleeding
3. Head aches
4. Back aches
5. Hypertension
6. Dizziness
7. Abdominal pains
8. Management
9. Other (Specify)

038

How long do you intend to continuously use this method?

- 1. 1 - 5 Months
- 2. 6 - 11 Months
- 3. 1 - 2 Years
- 4. 3 - 5 Years
- 5. 6 + Years

039

Have you always been able to obtain the method you are currently using from the clinics?

- 1. Yes
- 2. No

(Skip to Question 042)

040

What did you do when you could not obtain the method you are currently using from the clinic?

.....

.....

041

Are you satisfied with the service system in the clinic?

- 1. Yes
- 2. No

042

Do you intend to continue getting Family Planning supplies and services from this clinic?

- 1. Yes
- 2. No

043

Do you think there is any reason why someone interested in Family Planning would not want to obtain services from this clinic.

- 1. Yes
- 2. No

(Skip to Question 041)

044

What reasons would they have?

- 1. Prolonged waiting time
- 2. Expenses
- 3. Inadequate contraceptive supplies
- 4. Poor client/staff relations
- 5. Other (Specify)

045

Is this clinic open at the most convenient time for you?

- 1. Yes
- 2. No

046

If you had a choice what time would you prefer to obtain your Family Planning Method?

- 1. Morning
- 2. Afternoon
- 3. Evening
- 4. No Preference

047

Are you happy with the treatment you receive from the personnel with whom you relate in the clinic?

- 1. Yes
- 2. No

048

What make you happy?

- 1. Commitment of Duty
- 2. Social Relations
- 3. Speed
- 4. Other (Specify)

049

What makes you unhappy?

- 1. Impersonal Nature
- 2. Prolonged Waiting Time
- 3. Anti-Social Relation
- 4. Other (Specify)

050

On the whole are you satisfied or dissatisfied with the Family Planning Services provided in this clinic?

- 1. Very Dissatisfied
- 2. Dissatisfied
- 3. Okay
- 4. Satisfied
- 5. Very Satisfied

051

Does the clinic management use any ways to encourage you to use Family Planning Methods?

- 1. Yes
- 2. No

052

What are these ways?

- 1. Lectures given in clinic
- 2. Reading materials eg., leaflets
- 3. Tangible incentives
- 4. Home visits by clinical staff
- 5. Other (Specify)

053

In what ways do you think the clinic services can be improved?

- 1. Better appointment system
- 2. Punctuality of clients
- 3. Punctuality of staff
- 4. Less clinic time per session
- 5. I do not know
- 6. Others (Specify)

054

Time of Arrival at the clinic

Time of Departure from the clinic

APPENDIX II

FAMILY PLANNING SERVICE DELIVERY POINTS (SDPs) IN NAIROBI

<u>NAME</u>	<u>TYPE</u>	<u>DAY</u>	<u>RUN BY</u>
1. Kenyatta N. Hospital	H	Daily (A.M.)	Ministry of Health (MO)
2. Eastleigh Clinic	HC	Daily	NCC
3. Pumwani Maternity Hospital	H	Mondays	NCC
4. Family Welfare Clinic	D	Daily	Parastatal (KNH)
5. Mathare Hospital	H	Daily	MOH
6. Kenya Airforce Hospital	H	Daily	MOH
7. FPAK Private Clinic	CL	Daily	NGO (FPAK)
8. Eastleigh Lions Clinic	CL	Daily	NCC
9. Mbotela Clinic	CL	Daily	NCC
10. Embakasi Clinic	HC	Daily	NCC
11. Kariokor Clinic	CL	Daily	NCC
12. Shauri Moyo	CL	Daily	NCC
13. Pangani Clinic	CL	Daily	NCC
14. Highridge Clinic	CL	Daily	NCC
15. Ngara Health Centre	HC	Daily	NCC
16. Power & Lighting Clinic	CL	Daily	Parastatal
17. Karura Health Centre	HC	Daily	NCC
18. Riruta Health Centre	HC	Daily	NCC
19. Kariobangi Health Centre	HC	Daily	NCC
20. Charles New Rd. Clinic	CL	Daily	NCC

21.	Maringo Clinic	CL	Daily	NCC
22.	Makongeni Clinic	CL	Daily	NCC
23.	Sanford Road Clinic	CL	Daily	NCC
24.	Woodley Clinic	CL	Daily	NCC
25.	Waithaka Health Clinic	HC	Daily	NCC
26.	Kangemi Health Centre	HC	Daily	NCC
27.	Nairobi South Clinic	CL	Daily	NCC
28.	Ofafa Clinic	CL	Daily	NCC
29.	State House Clinic	CL	Daily	NCC
30.	Bohra Rd. (Lagos Rd.) Clinic	CL	Daily	NCC
31.	Jerusalem Clinic	CL	Daily	NCC
32.	Kaloleni Health Clinic	HC	Daily	NCC
33.	Hono Crescent Clinic	CL	Daily	NCC
34.	Jinnal Avenue Clinic	CL	Daily	NCC
35.	Muthurwa Clinic	CL	Daily	NCC
36.	Pumwani Clinic	CL	Daily	NCC
37.	Bahati Health Clinic	HC	Daily	NCC
38.	Madaraka Health Clinic	HC	Daily	NCC
39.	Ruaraka Clinic	CL	Daily	NCC
40.	Karen Health Clinic	HC	Daily	NCC
41.	Kamiti (Prison) Hospital	H	2 Mondays	MOH
42.	University Health Services	D	Daily	UON
43.	Langata Health Clinic	HC	Daily	NCC
44.	Kahawa Health Clinic	HC	Daily	NCC
45.	Mathare Special Clinic	CL	Daily	Mission

46.	Forces Memorial Hospital	H	Daily	MOH
47.	Forces Memorial Hospital	H	Daily	NCC
48.	Umoja Health Clinic	HC	Daily	MOH
49.	Kawangware Health Clinic	HC	Daily	MOH
50.	G.S.U HQs.MCH/FP	CL	Daily	MOH
51.	Kahawa Garrison	D	Monday	MOH
52.	82' Moi Airforce	D	Daily	MOH
53.	Langata Barracks	D	Daily	MOH
54.	Westlands Health Clinic	HC	Daily	NCC
55.	General Motors	CL	Daily	Private
56.	A.P. Dispensary Embakasi	D	Daily	MOH
57.	Kenya Utalii Clinic	D	Daily	MOH
58.	Dr. Auma Samson	Dr.	Daily	Private
59.	Dr. Baj Kararjit	Dr.	Daily	Private
60.	Dr. Bannum Hax	Dr.	Daily	Private
61.	Dr. Burkley R. Milton	Dr.	Daily	Private
62.	Dr. Candler P. Lawrence	Dr.	Daily	Private
63.	Dr. Carson Brian	Dr.	Daily	Private
64.	Dr. Da'Costa Alex	Dr.	Daily	Private
65.	Dr. Dora Ramashanker	Dr.	Daily	Private
66.	Dr. Dhupa Druv V.	Dr.	Daily	Private
67.	Dr. Eraj Yusuf	Dr.	Daily	Private
68.	Dr. Fraser Robert	Dr.	Daily	Private
69.	Dr. Githinji Eunice	Dr.	Daily	Private
70.	Dr. Gathage R. Shrinves	Dr.	Daily	Private

71.	Dr. Gunaratane Nohshsala	Dr.	Daily	Private
72.	Dr. Joshi Kirit	Dr.	Daily	Private
73.	Dr. Macheria Moffat	Dr.	Daily	Private
74.	Dr. Kamder N. Mashmukh	Dr.	Daily	Private
75.	Dr. Khedar Singh	Dr.	Daily	Private
76.	Dr. Makokha Andrea	Dr.	Daily	Private
77.	Dr. C. A. Loren	Dr.	Daily	Private
78.	Dr. Mathai Stephen	Dr.	Daily	Private
79.	Dr. Maree Sarla Verji	Dr.	Daily	Private
80.	Dr. Jane Miano	Dr.	Daily	Private
81.	Dr. Aggrarwal Prakash	Dr.	Daily	Private
82.	Dr. Mwathi S. N. Q.	Dr.	Daily	Private
83.	V. N. Hedi/Surgery	CL	Daily	NGO
84.	Three Stars N. Home	HC	Daily	Private
85.	Kenya Breweries Staff	CL	Daily	Private
86.	Langata Women Prison Dis.	D	Daily	MOH
87.	Canaan Med/Service	CL	Daily	Private
88.	BAT Dispensary	D	Daily	Company (coy)
89.	Likoni Rd. SDA Clinic	CL	Daily	Mission
90.	SDA Health Services	D	Daily	Mission
91.	Kariobangi MCH/FP Clinic	CL	Daily	Private
92.	Eastleigh FPAK Clinic	CL	Daily	FPAK
93.	Kenyatta University	D	Daily	Parastatal
94.	Mfangano Street Clinic	CL	Daily	Private
95.	Umoja Health Services	CL	Daily	Private

95	Dr. Q. M. Yamain	Dr.	Daily	Private
96	Dr. J. S. Mehta	Dr.	Daily	Private
97	Dr. Ravi Sharma	Dr.	Daily	Private
98	Dr. Ashwin Madhuwala	Dr.	Daily	Private
99	Dr. D. G. Ombati	Dr.	Daily	Private
100	Dr. M. A. Shah	Dr.	Daily	Private
101	Dr. J. M. M. Njokah	Dr.	Daily	Private
102	Dr. S. P. Amin	Dr.	Daily	Private
103	Dr. G. Kimani	Dr.	Daily	Private
104	Dr. J. K. Mbuthia	Dr.	Daily	Private
105	Dr. Y. B. Ruparel	Dr.	Daily	Private
106	Dr. (Mrs) Shah Elam	Dr.	Daily	Private
107	Dr. (Mrs) Shah N. O.	Dr.	Daily	Private
108	Dr. L. Munyua	Dr.	Daily	Private
109	Dr. A. P. Gupta	Dr.	Daily	Private
110	Dr. F. J. Devlik	Dr.	Daily	Private
111	Dr. J. S. Sokhi	Dr.	Daily	Private
112	Dr. J. A. Alouch	Dr.	Daily	Private
113	MCH/FP CL. Kawangware	Dr.	Daily	Private
114	Mathare N. FP Clinic	Dr.	Daily	Private
115	FAI Staff Clinic	CL	Daily	Coy
116	Eastlands Central Clinic	CL	Daily	MOH
117	Jamia Mosque Clinic	CL	Daily	Crescent Medical Aid
118	Kibera Clinic	CL	Daily	Private
119	Pangani Clinic	CL	Daily	Private

121. Biafra Clinic	CL	Daily	Private
122. Mathare North H. C.	HC	Daily	NCC
123. Dandora II H. C.	HC	Daily	Private
124. Genesis Medical Clinic	CL	Daily	Private
125. Kibera HD Project	CL	Daily	Mission
126. Mlac H/CL	CL	Daily	Private
127. Nakih Health Services	CL	Daily	Private
128. Jamii Bora Clinic	CL	Daily	Private
129. Buru Buru Medical Centre	HC	Daily	Private
130. Dr. Taylor Ndabari	Dr.	Daily	Private
131. NCPD Clinic	CL	Daily	Private
132. Dandora MCH/FP Clinic	CL	Daily	Private
133. Kenya Pipeline Staff Clinic	CL	Daily	Coy
134. Nawa MCH/FP Clinic	CL	Daily	Private
135. Family Health Clinic	CL	Daily	Private
136. Wilma Private Clinic	CL	Daily	Private
137. Wanauchi	CL	Daily	Private
138. Marie Stopes Clinic	CL	Daily	Private
139. Upendo Clinic	CL	Daily	Private
140. Kasarani M. N. Home	M	Daily	Private
141. Makunga Health Services	CL	Daily	Private
142. Eastleigh Clinic	CL	Daily	Private
143. Baba Ndogo Health Clinic	HC	Daily	NCC
144. Dr. Chilamkuthi M. Rao	CL	Daily	Private
145. Kayole Clinic	CL	Daily	Private

146. Ngomongo Health Services	M	Daily	Private
147. Ayany Estate Health Services	CL	Daily	Private
148. Mlango Kubwa Clinic	CL	Daily	Private
149. Guru Nanak Bangaria Hospital	M	Daily	Private
150. Njeru Kathungu Clinic	CL	Daily	Private
151. Dr. E. N. Mwathe	Dr.	Daily	Private
152. Rongai Health Services	CL	Daily	Private
153. Githurai MCH/FF Clinic	CL	Daily	Private
154. Ngong Road Clinic	CL	Daily	Private
155. Dandora Medical Clinic	CL	Daily	Private
156. California Health Clinic	CL	Daily	Private
157. Laini Saba Medical Clinic	CL	Daily	Private
158. Lay Northey Clinic	CL	Daily	NCC
159. Avenue Medical Clinic	CL	Daily	NCC
160. St. Judes Health Clinic	CL	Daily	NCC
161. Kibera Health Services	CL	Daily	NCC
162. Eastleigh Health Services	CL	Daily	NCC
163. Doya Clinic	CL	Daily	NCC
164. Liana Clinic	CL	Daily	NCC
165. Juja Clinic	CL	Daily	NCC
166. St. Odillas Dispensary	D	Daily	NCC

ABBREVIATIONS

NCC - Nairobi City Commision

MOH - Ministry of Health

D - Dispensary

CL - Clinic

HC - Health Clinic

H - Hospital

Coy - Company

UON - University of Nairobi

SOURCE: Nairobi, Provincial Population Report, 1989.