# Assessment of Quality of Care and Utilisation of Family Planning Services in Sana'a City, Yemen

Najiah Saleh Mohammed Bahubaishi

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# Assessment of Quality of Care and Utilisation of Family Planning Services in Sana'a City, Yemen

**Thesis submitted in accordance with the requirements of the University of Liverpool for the degree of Doctor in Philosophy**

**By**

**Najiah Saleh Mohammed Bahubaishi**

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# DEDICATION

*To My Parents Merriam and Saleh who are always there for me*

*To the soul of my uncle Ahmed*

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## LIST OF ABBREVIATIONS

| | |
|---|---|
| AGI | Alan Guttmarcher Institute |
| AIDS | Acquired Immune Deficiency Syndrome |
| CQI | Continuous Quality Improvement |
| CSO | Central Statistic Organization |
| DHS | Demographic and Health Survey |
| EMRO | Eastern Mediterranean Regional Office |
| FP | Family Planning |
| GOY | Government of Yemen |
| HDI | Human Development Index |
| HIV | Human Immune Deficiency Virus |
| ICPD | International Conference on Population and Development |
| IMF | International Monitory Fund |
| IPPF | International Parenthood Federation |
| IUD | Intra Uterine Device |
| KAP | Knowledge Attitude and Practice |
| LDC | Least Developed Countries |
| MCH | Maternal and Child Health |
| FP | Family Planning |
| MENA | Middle East and North Africa |
| MI | Macro International |
| MMR | Maternal Mortality Ratio |
| MOPH&P | Ministry of Public Health and Population |
| NGOs | Non Governmental Organization |
| NHS | National Health Services |
| NPC | National Population Council |
| NPC/TS | National Population Council /Technical Secretariat |
| PDRY | People Demographic Republic of Yemen |
| PHC | Primary Health Care |
| PRSP | Poverty Reduction Strategy Paper |
| QA | Quality Assurance |
| RTIs | Reproductive Tract Infection |
| SAs | Situation Analysis study |

| | |
|---|---|
| SAM | Service Availability Module |
| SCDs | Supreme Council of Drugs |
| SDPs | Service Delivery Points |
| STDs | Sexual Transmitted Diseases |
| STIs | Sexually Transmitted Infections |
| TFR | Total Fertility Rate |
| TQM | Total Quality Management |
| UK | United Kingdom |
| UN | United Nations |
| UNCIEF | United Nations Children Fund |
| UNDP | United Nations Development Programme |
| UNFPA | United Nations Population Fund |
| WHO | World Health Organization |
| WNC | Women National Committee |
| YAR | Yemen Arab Republic |
| YDMCHS | Yemen Demographic and Maternal and Child Health Survey |
| YFCA | Yemen Family Care Association |
| YFHS | Yemen Family Health Survey |
| YGC | Yemen General Congress |

## ABSTRACT

**Assessment of Quality of Care and Utilization of family Planning Services in Sana'a City, Yemen.**

**Background and justification:** Yemen is a high-fertility country with elevated levels of maternal mortality and unmet need for family planning. The government of Yemen conceived family planning services as an integrated part of the overall reproductive health services .Yet despite these compelling reasons for family planning services, and despite the unmet need, the services that do exist are often under-utilized. One hypothesis explaining this conflict between need and practice is the poor quality of the services that are offered. Despite the growing body of literature aimed at defining and measuring quality of care in family planning in recent years, the literature review reveals a number of gaps and unanswered questions. Among these are the concerns that the dimensions of quality may be perceived and defined differently by clients than by the researcher, the need of approach of greater depth that explores the full range of manifested and latent dimensions of client provider interactions, their determinants and their consequences and the question of underutilization. Moreover, the voice and view of clients that are essential aspects in initiatives to improve the quality of care provided by family planning programmes are often neglected. A comprehensive acceptable approach for assessing the quality of family planning services will help in effecting change to improve services delivery and to ensure that limited and declining resources which are available for health services are utilized in the most effective and efficient way.

**Aims and specific objectives:** The study was conducted to develop a systematic approach for assessment of the quality of family planning services that is appropriate for Yemen and perhaps for other Middle Eastern countries. This approach will provide policy and decision makers in Yemen with appropriate information to improve the quality and utilisation of the services. The study has five specific objectives:

1. To measure the quality of family planning services provided by service delivery points (governmental and non-governmental organizations) in Sana'a city, according to the following six elements of quality in the Bruce-framework:

   i) Choice of methods.
   ii) Information given to clients.
   iii) Technical competence.
   iv) Interpersonal relations.
   v) Follow-up and continuity mechanisms.
   vi) Appropriate constellation of services.

2. To identify whether there are variations in the levels of quality of care related to the type of service delivery points (governmental and non – governmental organizations).

3. To study the perception of clients for the quality of care of family planning services.

4. To further develop the Bruce-framework for the assessment of quality of care of family planning services.

5. To measure utilization of services, in relation to the type of service delivery points (governmental and non-governmental organizations).

**Methods:** The study is a descriptive and cross sectional .It includes all service delivery points (clinics) providing family planning services within the Government and non-governmental organizations in Sana'a city. The target populations were clients attending the service delivery points seeking family planning services during the period of the study. Data collection instrument consisted of: in-depth interviews with family planning clients, exit interviews with clients, direct observation of client-provider interaction and review and analysis of service statistic data. The exit interview data collection instrument was designed to help in recording what happens when a provider counsels and examines a family planning client. The observation of client-provider interactions provided most of the information regarding how a client is counseled, examined, and provided with a method. From the client perspective the assessment of quality of care is a complex subject, and concurrent use of additional data collection method is required to ensure validity. In this respect, in-depth interviews were used concurrently with a quantitative study. The aim of in-depth interviewing was to elicit the interviewee's perspective, rather than that imposed upon by the researcher. Service statistic data were collected to measure the utilization of services. Data was validated and entered using the SPSS statistical package. The analysis includes summary statistics, frequency distribution, cross-tabulation, and measures of associations based on the chi-square test of independence. Multivariate analysis using logistic regression was applied to the data on client's personal characteristics. For analysis of the in-depth interview we used content analysis.

**Results:** Assessment of the interpersonal element of quality of care raises a concern with privacy, as clients needs for privacy is, for most of the time, not considered in both sectors, although the NGOs give relatively more attention to this aspect. Clients are not given a chance to express their concerns or to ask questions and most of the time they are not told in advance about the medical examination they should undergo. This applies to both sectors, governmental and non-governmental. For the choice of method aspect of quality the data revealed that both sectors are performing well in terms of providing clients their preferred method of family planning. Although there is low information given about condom, in fact condom was also found to be the least preferred method by clients. Information given to clients is an extremely weak programme element in both sectors, both in terms of family planning information and even more so in terms of STD/HIV. The findings on the quality of pelvic examination and IUD insertion are not encouraging for both sectors. The main concern found was aseptic procedures, particularly in the use of gloves during pelvic examinations. STD screening at least through introductory questions on possible symptoms is not carried out consistently. The NGO providers seem to do better at

informing their clients of the date for their next visit compared to their government counterparts. However, not many clients are told that they can switch method if they were not satisfied with their current method, especially within the government setting. Clients approaching NGOs complained of long waiting hours, which was not the case for their government counterparts. For most of the clients who responded to the in-depth interview, quality means the way of treatment they encounter. Clients perceive that good treatment involves staff attitudes, and they also identified staff technical competence and communication skills as prerequisite for good treatment. Themes emerging from the analysis of the in-depth interview transcript includes, good treatment, privacy during examination and consultation, good medical attention, effect of contraceptive on client health, social and cultural barriers (provider bias, obedience to husband and covert use of contraceptive), gender role (gender disparities and power imbalance between clients and their spouses). In general clients tend to focus upon the processes of services of care, as well as to the outcome of the services, rather than organizational structure or policy. Clients also focus on the socio-cultural barriers, which hinder their access to quality services and to comply with provider's recommendations. The three vantage points from which clients view quality are; the social and cultural barriers, the service –given process itself and the outcome of care, particularly with respect to individual knowledge and satisfaction with services.

**Conclusion and Recommendation:** The substantive results from the study suggest that the quality of care being provided could be improved. The overall weakness of the programme revolves mainly around family planning counseling, asepsis and STD/HIV integration. The most important aspect however lies in the poor interpersonal relations aspect of care, as client needs for privacy are not being taken into consideration as well as their social context. Without a through understanding of women's perceptions of family planning in specific contexts, we run the risk of incorrectly homogenizing and universalizing women and their needs, which would waken the effectiveness of family planning programmes.

Quality is a broad concept that no single approach adequately and fully measures. Alone any single approach can address only a piece of the total quality picture. Improving quality of care for clients means understanding their cultural values, previous experiences, and perceptions of the role of the health system, and then bringing service providers and the client's representative together to map out a shared vision of quality.

# Chapter One

# INTRODUCTION

## 1.1 BACKGOUND AND JUSTIFICATION

An average of 22 percent of all births in developing countries are unwanted (Bongaarts, 1997) . Also of the estimated 182 million pregnancies each year in developing countries, some 66 million are unintended, and about 36 million of these are estimated to end in abortion(AGI, 1999).

Millions of people who might be interested in family planning are not being served at all. In developing countries over 100 million married women of reproductive age are estimated to have an "Unmet need" for family planning (Robey et al., 1996). Unmet need, which is estimated from survey data, refers to married women who say that they would prefer to avoid or postpone childbearing but who are not using any method of contraception (Westoff, 1994).

There are many reasons for unmet need and for unintended pregnancies. For instance, on the supply side many women fear the side effects of contraceptive methods; having heard rumours or have experienced some side effects themselves. Some women lack accurate information about contraceptive methods or where to get them. On the demand side, some women may fear their husband's disapproval or retribution if they use family planning, or oppose family planning themselves because of religious beliefs or personal reasons(Bongaarts and Bruce, 1995)

The total unmet need for family planning in Yemen, based on the 1997 Yemen Demographic and Maternal and Child Health Survey (YDMCHS), was 39 percent, 17 percent for spacing and 21 percent for limiting. In the 2003 Yemen Family Health Survey (YFHS) the unmet need for spacing was 23.3 percent and for limiting 27.6 percent, with a total unmet need of almost 51 percent. In the meantime contraceptive prevalence has changed little in recent years, increasing among married women from 21 percent in 1997 to 23 percent in 2003 (CSO and MI, 1998, MOPH&P et al., 2004).

Religious prohibition was the reason stated for not intending to use contraception among 15 percent of respondents in the 1992 YDMCHS, and this increased slightly to 17 percent in 1997 YDMCHS, before it decreased to 10 percent among respondent in the 2003 YFHS. By the same token husband disapproval was a hindering factor for 16 percent of women in practicing contraceptive in 1992, and this reason decline to 9 percent in 1997 and to 6 percent by 2003.

Lack of knowledge about contraceptive methods or sources of supply were an important reason for non use of contraceptive for about one-fourth of Yemeni women, As cited in the 1992 YDMCHS, a considerably less proportion of women mentioned this reason in the 1997 YDMCHS and the 2003 YFHS, constituting eight and five percent respectively.

Fear of side effects as a reason for not intending to practice contraception among Yemeni women showed an upward trend. This reason was cited by ten percent of Yemeni women in 1992YDMCHS, the corresponding figure from the 1997 YDMCHS and the 2003YFHS were 12 percent and 15 percent respectively(CSO and MI, 1993, CSO and MI, 1998, MOPH&P et al., 2004).Understanding of the problems experienced by users is therefore important for improving family planning services in Yemen.

Yemen has one of the highest population growth in the world, averaging almost 3.5 percent, and the country experienced slow economic growth (3 percent per annum). The estimated total fertility rate in 2003 is still high (6.2 births per woman). The share of population living below the poverty line is estimated to be 21 percent in 1995 (GOY, 2003). Public expenditure on health was found to be low and modest increases have not kept pace with the population growth. A low life expectancy at birth is approximately 57.5 years of both sexes and this reflects the prevailing poor health conditions. Maternal deaths account for 42 percent of all death among women aged between15-49 (CSO and MI, 1998).

The government is increasingly concerned about the adverse effects of such a rapid growth on development effort. In 1991 the government formulated the first population policy document where a set of quantitative objectives were adopted to be achieved by the year 2000. The updated National Population Policy (2001-2025)

aims to intensify the national efforts to expand choices, services and information for couples in order to regulate fertility so that Total Fertility Rate (TFR) may reach 4 live births by the year 2015, then less than 3.3 by the year 2025, and a rise in contraceptive prevalence to reach 56 percent by the year 2025, with modern contraceptives constituting at least 35 percent of all methods used (NPC/TS, 2002).

The Government of Yemen perceived family planning services as an integral part of the overall reproductive health care services. The public sector is a major provider of family planning in Yemen as it provides contraception methods to5 out of 10 users of modern methods. Private sector and NGOs also play a major role in providing modern contraceptive methods to those who want to regulate their fertility (MOPH&P et al., 2004).Yet despite these compelling reasons for family planning services, and despite the unmet need, those services that do exist are often underutilized (Bahubaishi, 1997) .One hypothesis in explaining this conflict between need and practice is the poor quality of the services that are offered.

Family planning programmes in developing countries have been trying to implement strategies that make services available to individuals at an affordable cost, but they have not paid adequate attention to the quality of these services. Historically, population researchers were concerned mainly with population growth. Hence family planning programmes were assessed largely for their potential impact on demographic outcomes, such as contraceptive prevalence, adoption, continuation, and total fertility rate (Bruce, 1990).

The 1994 International Conference on Population and Development (ICPD) held in Cairo brought to the forefront the importance of the quality of care of family planning services and has added impetus to concerns about clients' health and satisfaction. This reflects the general shift of emphasis from demographic concerns to a focus on women's reproductive needs (UNFPA, 1994).

A central recommendation of the programme of action of the ICPD is universal access to a full range of safe and reliable family planning methods. Broadening the contraceptive choice, improving the quality of care, and ensuring reproductive rights are the fundamental elements of the vision of reproductive health as outlined in the ICPD. However, Yemen has endorsed ICPD declarations; the current level of

use of reproductive health services is far lower than expected given the government's supportive policies and a large unmet need for family planning. Hence a need has emerged for a strategic assessment that identifies actions to address these concerns.

The quality of family planning services has been at the centre of research and policy interest since early 1990. A framework developed by Bruce (1990) is the basis for most of the efforts in measuring the quality of care in family planning. The framework hypothesized that quality of care is composed of six elements relevant to improving the quality of care in family planning programmes including: choice of contraceptive methods, information given to clients, technical competence, interpersonal relationships, continuity and follow up, and the appropriate consultation of services. The framework also provided a point of references for those interested in studying quality of care and offered a theoretical structure with which quality - its constituent element, determinants, and effects - could be viewed (Bruce, 1990).

Despite the growing body of literatures aimed at defining and measuring the quality of care in family planning in recent years the literature review reveals a number of unanswered questions and gaps in the information. Some of the questions that merit further study are: Concerns that the key dimensions of quality may be perceived and defined differently by clients or by the researcher, the need for an approach in greater depth that explores the full range of manifested and latent dimensions of client provider interaction, their determinants and their consequences, the question of under-utilisation of services and variation of utilisation among health facilities, and whether choice of a facility for family planning services is guided by perceptions of the standards of care it provides. The current study seeks to narrow this gap in knowledge of family planning and it is hoped that this study will help in redefining quality, opertionalizing the important elements as well as providing the basis for revising the instruments that have been used to collect the data.

Assuring the good quality of services is an ethical obligation of health care providers. Research is beginning to show that good quality of services also offers practical benefits to family planning clients and programmes. A comprehensive, acceptable approach for assessing the quality of family planning services will help

in effecting changes to improve service delivery and to ensure that limited and declining resources available for health services are utilised in the most effective and efficient way.

## 1.2 OVERALL AIM AND OBJECTIVES

The study was conducted with the following aim and objectives:

### 1.2.1 Overall aim

The aim of this study is to develop a systematic approach for assessment of the quality of family planning services that is appropriate for Yemen and perhaps for other Middle Eastern countries. This approach will provide policy and decision-makers in Yemen with appropriate information to improve the quality and utilisation of the services.

### 1.2.2 Specific objectives

1. To measure the quality of family planning services provided by service delivery points (governmental and non-governmental organizations) in Sana'a city, according to the following six element of quality in the Bruce-framework:

    i) Choice of methods.
    ii) Information given to clients.
    iii) Technical competence.
    iv) Interpersonal relations.
    v) Follow-up and continuity mechanisms.
    vi) Appropriate constellation of services.

2. To identify whether there are variations in the level of quality of care related to type of service delivery points (governmental and non-governmental organizations (NGOs).

3. To study the perceptions of clients for the quality of care of family planning services.

4. To further develop the Bruce-framework for the assessment of quality of care of family planning services.

5. To measure the utilisation of services, in relation to the type of service delivery points (governmental, non-governmental organizations).

### 1.2.3 Research questions

The study aims to answer the following questions:

1. What are the important quality issues for family planning clients? ("What are the requirements")?

2. How far do different providers try to improve the quality of these aspects of family planning services ("How do providers meet these requirements")?

3. Does the attention paid to the quality of family planning services make a difference to:
   - a- Client utilization of services
   - b- Client satisfaction

4. How can the available methodology be improved in order to produce a standard acceptable approach for assessment of the quality of family planning services?

## 1.3 PLAN OF THE THESIS

The thesis is organized in seven chapters. **Chapter One, Introduction**, provides the background and justification for the study and the general aim and objectives. **Chapter Two, Literature Review,** commences with a brief introduction concerning the idea of quality in general followed by the concepts of quality assessment and assurance in the health care services. This is followed by a critical review of the literature on the quality of care of family planning services, with reference to its definition, concept and client satisfaction, as well as the relationship between quality of care and utilization of services. The main dimension of quality and framework for assessment of quality of care in family planning setting is presented with a detailed discussion of how to measure the dimension of quality of care, including the approaches, measurement tools and indicators. The chapter closes with an overview of the contribution of the literature review to the focus and the methodology of the study. **Chapter Three, Country Profile,** describes Yemen's political, economic and demographic features, and the socio-economic development of the country, with emphasis on gender and development as well as the health care system infrastructure and reform process. The main focus is on the development of the national population policy with reference to the family planning policy and programme. The chapter also provides analyses of the health situation of women, including the social context and role of women, their fertility preferences and behaviour, and their knowledge, attitude and practices of contraception. **Chapter Four, Study Methods**, describes the study setting, the study design, instruments and procedures as well as the quality assurance procedures for the data and ethical issues and other considerations related to the study. **Chapter Five, Results**, describes the results of data analysis starting with description of the study population, and covering the social and demographic characteristics of the respondents. This is followed by presenting the findings of the assessment of quality of care in relation to six element of quality through a survey conducted in SDPs providing family planning services in Sana'a city, including governmental and NGO SDPs through exit interview and observations of clients–providers interaction. This is then followed by a qualitative assessment of the perceptions of clients of the quality of care of family planning services. The chapter also presents the findings on the utilization of the SDPs for clients attending both governmental and NGO service delivery points using service statistic data. Finally the chapter presents the important quality issues for family planning clients and the response of family planning service providers to the clients need for quality services. The chapter concludes by a summary table, which shows the full set of main results by type of instruments used. The discussion, conclusion and recommendations are presented in the final two chapters. **Chapter Six, Discussion**, considers the reliability and validity of the data, generalisability of the findings and the limitations of the research, and discusses the main findings of the research in relation to the study objectives, and comparisons are also made with the findings of previous studies within the field. The thesis concludes with **Chapter Seven, Conclusion and Recommendations**, which provides a synopsis of the study findings, a set of recommendations aimed at improving the quality of family planning services in Yemen, and it also identifies areas for future research.

# Chapter Two

# LITERATURE REVIEW

## 2. INTRODUCTION

This chapter reviews the literature with regards to the quality of care and utilization of family planning services. The chapter is arranged into seven sections. Section one presents a brief introduction concerning the concept of quality in general. Section 2.2 covers the concepts of quality assessment and assurance in the health care services. Section 2.3 gives an overview of the quality of care of family planning services, with reference to its definition, concept, client satisfaction with service, as well as the relation between quality of care and utilization of services. The main dimension of quality and framework for assessment of quality of care in family planning setting is presented in section 2.4. A detailed discussion of how to measure the dimension of quality of care including the approaches, measurement tools and indicators are presented in section 2.5. Sections 2.6 and 2.7 represent the contribution of the literature review to the focus and the methodology of the study respectively.

## 2.1 INTRODUCTION TO THE CONCEPT OF QUALITY

The simplest definition of quality is inspired by the work of W. Edwards Deming, a pioneer of the quality movement in industry. At its most basic, providing good quality means "doing the right things right"(Blumenfeld, 1993).

Quality has different connotations for different people, and whether a particular programme's quality is adequate is a matter of judgment (Donabedian, 1980).

There is general agreement that client satisfaction is an integral component of service quality (Sitzia and Wood, 1997) and expanded definition of health service quality make explicit mention of patient satisfaction (Lohr, 1990).

The argument has been offered that the effectiveness of health care is determined, by some degree, by consumers' satisfaction with the services provided. Support for

this view has been found in studies that have reported a satisfied patient is more likely to comply with the medical treatment prescribed, more likely to provide medically relevant information to the provider, and more likely to continue using medical services (Aharony and Strasser, 1993, Ware et al., 1983).

A variety of studies have found that patients who are dissatisfied are more likely not to retain for future care (Weiss and Senf, 1990). Patient satisfaction and received quality will influence utilization of services (Wouters, 1991) as well as compliance with practitioner recommendations(Gilson et al., 1994).

## 2.2 QUALITY OF HEALTH CARE SERVICES

### 2.2. 1 The Concept of Quality in Health Care and Health Services

Origins of the quality movement in medicine date back to the first century A.D. in parts of India and China, at that time standards governing who could practice medicine were defined. In Europe efforts to license medical practitioners developed as early as 1140 in Italy and evolved into uniform educational standards, state examinations, and licensing in the $19^{th}$ century (Mcgrew, 1985, Shryock, 1967). In the US the modern quality assurance movement in health care began in 1917, when the American College of Surgeons compiled the first set of minimum standards for US hospitals to find and eliminate poor care (Brooks, 1995).

Quality movement in health care draws on disparate roots in medicine and industry. The medicine approach relies on government licensing, professional credentials, internal audits and, more recently, external inspections to maintain standards, weed out poor performers, and solve problems. The industry approach adopted a different philosophy; training employees to prevent problems, strengthening organizational systems, and continually improving performance (Berwick, 1989).

In the 1980s weaknesses in the inspection process, the persistence of poor quality, and the emergence of new management techniques in industry, together with rising costs, led health care professionals in developed countries to begin reassessing accreditation and standards-based quality assurance (Koeck, 1997, Morgan and Murgatroyd, 1994). US health care organizations began testing the industrial

philosophies of Continuous Quality Improvement (CQI) and Total Quality Management (TQM) (Blumenfeld, 1993, Koeck, 1997). At the same time, the hospital accreditation system expanded its focus from inspections to promoting quality improvement (Brooks, 1995). In the UK the National Health Service adopted a formal quality policy in 1991 and recognized CQI as the most cost-effective way to implement it (Morgan and Murgatroyd, 1994).

Donabedian was the most substantial commentator on quality in health care who took the view that it is necessary to translate the quality initiatives into criteria and standards wherever possible, and that these criteria can be identified within three distinct aspects of health care – Structure, Process and Outcomes (Donabedian, 1980). Structures are the inputs that make care possible. Processes are the tasks that transform these inputs into products and services. Together, structures and processes determine clinical outcomes.

For Donabedian good quality care is the kind of care in which medical science and technology are applied in a manner that maximizes benefits to health without correspondingly increasing risks. "The degree of quality is...the extent to which the care provided is expected to achieve the most favourable balance of risks and benefits". "High quality medical care is traditionally thought to consist of a scientific or technical component and an interpersonal component that together enable the patient to attain the highest possible functional state and psychosocial result" (Donabedian, 1980).

Another important contributor to the debate on quality describes quality as "not just satisfying but delighting the customer by continuously meeting and improving upon agreed requirement", (Deming, 1982) , whilst his contemporary Juran saw quality as "fitness for purpose" (Juran, 1987). These three are perhaps the leading lights in the thinking about quality in health care that has been followed by so many others (Maxwell, 1984, Ovretveit, 1992).

Quality needs to be multidisciplinary, with a culture of learning from others and sharing good practices (Al-Mandhari, 2002, Donabedian, 1980, Maxwell, 1992, Ovretveit, 1992).

Maxwell developed Donabedian's (1980) original work by adding six dimensions of quality to the framework "structure, process, and outcome", which are effectiveness, acceptability, efficiency, access, equity, and relevance (Maxwell, 1984). The Joint Commission on Accreditation of Healthcare Organization (JCAHO) describes these dimensions as follows:

| | |
|---|---|
| Efficacy - | "Is the service (care/product) evidence based?" |
| Appropriateness - | "Can those patients who need the service access the service?" |
| Acceptability - | "Is the service provided in a way that is acceptable t( most of the patients?" |
| Effectiveness - | "Is the service carried out well in practice so that the patients receive the expected benefits?" |
| Efficiency - | "Is the service carried out in a cost-effective way?" |
| Continuity - | "Is there appropriate follow up, exchange of information and referral?" |

Another recent significant contributor to this approach has added the idea of "customer responsiveness" and of giving the clients what they want (Ovretveit, 1992). He defines quality in health care as "fully meeting requirements at the lowest cost" or, more specifically, as "fully meeting the needs of those who need the services most, at the lowest cost to the organization, within limits and directives set by higher authorities and purchaser".

The purpose of Maxwell's grid was to expand, clarify and illuminate dimensions of quality in a systematic and structured way. This was considered to be particularly beneficial for the quality assessments undertaken by the providers and purchasers of the health care (Maxwell, 1992). However, there is no evidence that the grid has been used to assess users' views, as Maxwell (1992) suggests, and there is no evidence of these dimensions being clearly defined from the users' perspective (Hirst and Hewison, 2001).

Hirst and Hewison (2001) argue that Maxwell has defined the six dimensions of quality from the perspective of planners and providers of care, users' view being minimized and confined to the "acceptability" dimension.

### 2.2.2 Quality Assurance (QA)

Donabedian defines QA as "all the arrangements and activities that are meant to safeguard, maintain, and promote the quality of care" (Donabedian, 1980). Ovretveit(1992) argues that a service under a QA programme will be able to focus more in predicting and preventing quality problems, and will use more sophisticated quality method to prevent and predict poor quality(Ovretveit, 1992). Stebbing Lionel (1993) stated that "quality assurance is not something that can be tacked on to a service process, but it is a philosophy of total integration of the business to achieve the required result"(Stebbing Lionel . 1993).

Another definition stated by (Ellis and Whittington, 1993) as "QA is the sum of procedures established for making sure and being able to guarantee that high level of quality are maintained. These procedures include specification of standards, observation of practice, comparison of practice with standards, and instigation of action for improvement as and when necessary.

The World Health Organization (WHO) in their own report avoids specifying a precise definition of QA as it was noted that difficulties in achieving consensus on an appropriate operational definition had handicapped the development of effective QA since the design of such programme depends to some extent on the definition of quality adopted. The WHO gives a very full statement of the QA aim, which is "to assure that each patient receives such a mix of diagnostic and therapeutic services as is most likely to produce the optimal achievable health care outcome for that patient, consistent with the state of the art medical science, and with biological factors such as the patient's age, illness, concomitant secondary diagnosis, compliance with the treatment regimen, and other related factors; with the minimal expenditure of resources necessary to accomplish this result; at the lowest level of risk of additional injury or disability as a consequence of treatment; and with

maximal patient satisfaction with the process of care, his/her interaction with the health care system, and the results obtained" (Ellis and Whittington, 1993).

Activities to implement QA in health care are generally well received by patients and contribute to their overall satisfaction. Indeed one might argue that client satisfaction is the cornerstone of providing quality health care. This view receives support from various sources (Ellis and Whittington, 1993), and to be broadly due to the following reasons; economic, social, political, and professional.

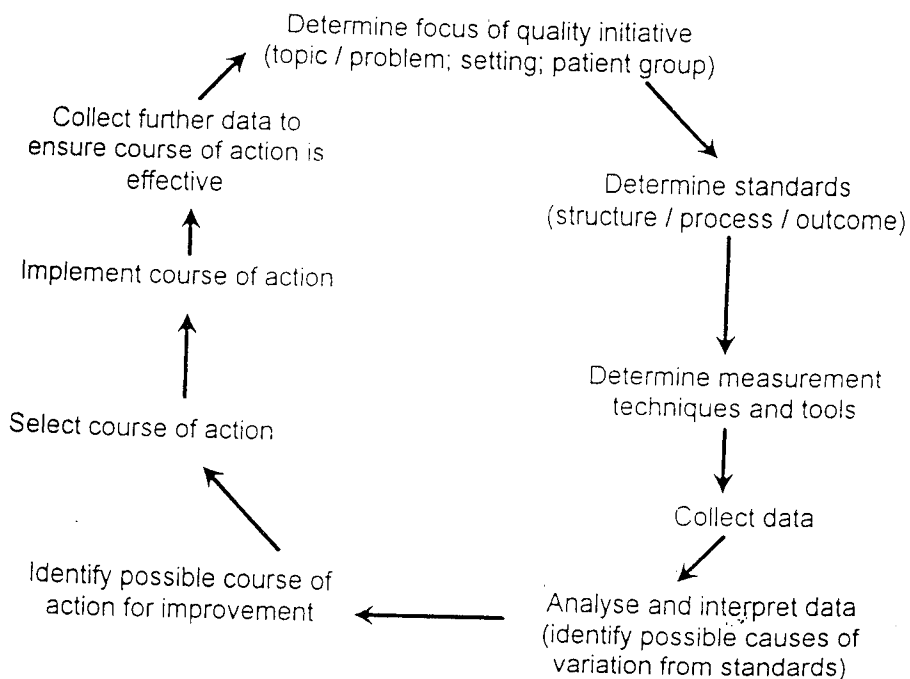
Improvement and advances in health technology and public knowledge and the pattern of chronic diseases developed lead to increases in both needs and expectation of service users, putting a pressure on the resources available. This pressure will initiate the search for a more cost effective quality assured service, which is guided by standards to assure that quality care is delivered and compatible with patient needs and expectations if possible. Application of quality assurance will tend to minimise the errors, misuse and wrong practice (De Geyndt W., 1995) and the social factor is originated from the global attitude to involve customers in planning for health care.

Donabedian consider consumers (patients, as well as those who may legitimately speak on their behalf) to have a role as a contributors to quality assurance in three ways; by defining what quality is, by evaluating quality, and by providing information that permits others to evaluate it (Donabedian, 1992).

More and more pressure is placed on politicians to assure the quality of health care provided to the public. Increasingly health professionals are also seeing that quality assurance is the way to give the best service in a cost effective manner through the effective and efficient implementation of good standards, norms, guidelines and operating procedures that ultimately result in acceptable outcomes for the clients of health care (Sitzia and Wood, 1997) .

As described by Ellis and Whittington (1993) the quality assurance cycle begins with standards setting, progressing to appraisal of the achievement of those standards and passes through the stages of identifying solutions and implementing of actions for improvement, concluding with evaluation of the quality improvements (Ellis R. and Whittington D., 1993).

**Figure 2.1 The Quality Cycle (Ellis and Whittington, 1993)**




Ellis and Whittington (1993) argue that choice must be made at each stage in the cycle. These include choice of quality topic or problem, choice of organizational setting or patient group, choice of aspect or dimension of service, choice of measuring technique(s) and, finally, choice regarding interpretation of the results of measurements and the determination of appropriate action(s) for improvement.

Assessing the quality level before implementation is an important issue that gives a full picture about how quality is actually presented. Planning for quality level assessment is very important in identifying a base line before implementing any quality intervention. Ellis and Whittington (1993) argue that assessment of quality at its base line level before a quality programme intervention has begun has some

advantages so as to identify areas where quality problems present themselves, and to assess the organization using data to the extent and how far this quality problem affects the services.

## 2.3 QUALITY OF CARE OF FAMILY PLANNING SERVICES

### 2.3.1 Definition

Quality of services refers to the attributes of family planning services, whereas quality of care refers to the way clients are treated by the system providing these services. Without good services it would be difficult to provide good care although providers, in theory, could treat clients with dignity and respect even if they cannot provide the services required or desired. Managers of family planning programmes need to focus on improving quality of care, which can best be done by improving quality of services (Jain, 1992).

Historically, quality has been defined at a clinical level and involves offering technically competent, effective, safe care that contributes to the client's well being. This approach neglected the interpersonal dimensions of care and suggested to some that high quality meant technically sophisticated and expensive equipment. Quality has sometimes been counted as synonymous with availability and/or accessibility of contraceptives (Bruce, 1990).

Quality care refers to technical quality of care, to non-technical aspects of services delivery such as clients' waiting time and staff attitude, and to programmatic elements such as policies, infrastructure, access, and management (Bruce, 1990).

Quality of care in family planning is an aim that women's health advocates support. Women's health advocates call for services that respect women's reproductive and sexual rights, provide balanced information and offer a free and informed choice among a wide range of methods (Berer, 1993).

### 2.3.2 Concept of quality in family planning

Historically, population researchers were concerned mainly with population growth, hence, family planning programmes were assessed largely for their potential impact on demographic outcomes, such as contraceptive prevalence, adoption, continuation, and total fertility rate (Bruce, 1990).

The quality of family planning services has been at the centre of research and policy interests since the early 1990s. The underlying assumption is that high quality family planning services will help maintain contraceptive use among initial family planning adopters and will generate new users (Jain, 1989). Jain, a leading expert on family planning, has said: "Without significant attention to quality, we will neither see a sustained increase in the contraceptive prevalence rate nor succeed in lowering birth rate through voluntary means" (Jain 1992: xi). In other words, programmes would have greater impact if rather than putting undue emphasis on recruitment, they took better care of the users they already had.

Advocates and activists have played an important part in the quality movement. Since the 1980s the international women's health movement has argued that woman's individual rights and well-being should take precedence over national numerical goals such as demographic targets. The target orientation of many family planning programmes, in their view, undermines the quality of the programmes (Berer, 1993).

Huezo and Diaz (1993) went a step further to argue that client' rights, in order to be viewed realistically, must be considered together with providers' rights and needs. They outlined providers' rights to receive training, supplies, guidance, backup, respect, encouragement, supervisory feedback, and their rights to self-expression. The authors argued that the relationship between client' and providers' rights must be considered when an effort is made to remove obstacles when offering good quality of care in family planning services (Huezo and Diaz, 1993).

The 1994 International Conference on Population and Development (ICPD) held in Cairo brought to the forefront the importance of the quality of care of family planning service and has added impetus to concerns about clients' health and

satisfaction. This reflects the general shift of emphasis from demographic concerns to a focus on women's reproductive needs.

A central recommendation of the programme of action of the ICPD is universal access to a full range of safe and reliable family planning methods. The ICPD Programme of Action also puts forward the following specific recommendations. Governments should:

- Ensure information and access to the wider population of safe and effective family planning methods appropriate to the individual's age, parity, family size preference and other factors, to enable men and women to exercise free and informed choice;
- Provide accessible, complete and accurate information about various family planning methods, including their health risk and benefits, side effects and their effectiveness in preventing the spread of HIV/AIDS and other sexually transmitted diseases;
- Ensure safe, affordable, and convenient services for the user;
- Ensure privacy and confidentiality;
- Ensure a continuous supply of high-quality contraceptives;
- Expand and improve formal and informal training in sexual and reproductive health care and family planning including training in interpersonal communications and counselling;
- Ensure adequate follow-up care, including that for side effects of contraceptive use.

The ICPD programme of action acknowledges that the implementation of its recommendations "is the sovereign right of each country, consistent with national laws and development priorities, with full respect for the various religious and ethical values and cultural background of its people, and in conformity with universally recognized international human rights. In the years since the (ICPD), numerous constituencies have articulated their ideas of how family planning services should be organized and rendered. The common theme being their visions that service should be responsive to the need s of individual clients (UNFPA, 1994).

### 2.3.3 Different points of view about quality

Clients, providers, managers, policy–makers, and donors all have differing but legitimate perspectives on what constitutes good quality care(Diprete et al., 1993).

Clients, whose perception of quality may be influenced by social and cultural concerns, place significant emphasis on the human aspects of care. Clients' perceptions are shaped by their cultural values, previous experiences, perceptions of the role of the health system, and interactions with providers (Kelly and Boucar, 2000).

For the health service provider's quality has meant clinical quality of care-offering which is technically competent, effective, safe care that contributes to an individual's well being(Diprete et al., 1993). Providers usually stress the need for technical competency, as well as infrastructure and logistical support from their institution. However, providers and clients may agree on the importance of certain elements of care, including affordability, convenient location, good provider attitudes, privacy and confidentiality, and availability of supplies (Ndhlovu, 1995).

Policy makers and donors are concerned with cost, efficiency, and outcomes for health investment as a whole (Hull, 1996, Newbrander and Rosenthal, 1997). It is unlikely the quality of care will receive all the attention it deserves based simply on the principles of human rights and welfare. A large number of donors continue to desire information about the level of care that correlates with specific types of performance and they seek to know whether improvement in quality of care will translate into aggregate benefit beyond the individuals' satisfaction with services. The desired aggregate will, for some be, higher levels of acceptance and more sustained contraceptive use.

### 2.3.4 Client satisfaction

Clients' satisfaction is an important indicator of services quality (Vuorj, 1987). When health care systems and those who work in them put clients first, they offer services that not only meet technical standards of quality but also satisfy clients' need for other aspects of quality, such as respect, relevant information, access, and fairness (Bruce, 1990, Donabedian, 1989). Indeed, Donabedian has suggested that

patient satisfaction is a major quality outcome in itself (Donabedian, 1992).

The value of the client's perspective on family planning services was increasingly recognized during the 1980s (Bruce, 1980, Edmunds et al., 1987, Simmons et al., 1986). A framework published by Judith Bruce in 1990, together with measurement and assessment tools developed by Anrudh Jain has been especially influential in focusing attention on the clients' perspective (Bruce, 1990, Jain, 1989).

Studies show that being a regular user is a predisposing factor for satisfaction; this is probably due to familiarity with the personnel and the setting of the centre, as well as the fact that regularity reflects an ongoing relationship with personnel in the health facility. This, in turn, is a reflection of satisfaction(Weiss, 1988).

Good care attracts, satisfies and keeps clients by offering them services such as supplies, information, and emotional support that they need to meet their reproductive goal. Interviews with clients in Chile, for example, found that good quality clinical services reduced clients' fears and increased their confidence in the care received (Vera, 1993).

Studies found that good services encourage people to continue using contraception when they want to avoid pregnancy. In Bangladesh, for example, rural women were asked whether field workers serving them were responsive, sensitive to their need for privacy, dependable, sympathetic, and informative. Women, who felt they received good care (as judged by their answers to these questions), were 27 percent more likely to adopt a family planning method and 72 percent more likely to continue using a method for up to 30 months than women who felt they had received poor care (Koenig et al., 1997). In the Philippines, among family planning clients in Bukidnon province, women were more likely to continue using their methods if they thought the provider was friendly, if they were satisfied with services, and if they had been told about the advantages and side effects of several methods (Sealza, 1994).

In China, study shows that women were far more likely to continue using injectable contraceptives when they had been thoroughly counselled on how the method works and its side effects. Only 11 percent of women receiving good counselling

had dropped out during one year compared with 42 % of women receiving limited counselling (Lei et al., 1996).

Family planning clients may discontinue their method or stop using family planning altogether; for example, if use of method is not explained and unintended pregnancy occurs (Cotton et al., 1992, Hubacher and Potter, 1993, Huezo and Diaz, 1993) ; if possible side effects were not explained in advance, or if side effects occur and are not taken seriously or managed appropriately (Cotton et al., 1992, Hardee et al., 1994, Huezo and Diaz, 1993, Ndhlovu, 1995) or if the programme runs out of supplies (Cotton et al., 1992, Huezo and Diaz, 1993) and if clients cannot get the method they want (Pariani et al., 1991).

Client satisfaction depends not only on service quality but also on clients' expectations as clients are satisfied when services meet or exceed their expectations (Thompson and Sunol, 1995). If clients' expectations are low or if they have limited access to any services, they may be satisfied with relatively poor services. As poor women in Bangladesh said, "Even though they behaved badly, I have to be content. We are lucky if we can get the free medicine that they gave out at the clinic" (Schuler and Hossain, 1998). However, client satisfaction is difficult to assess (Rosenberg, 1996).

Typically health surveys have evaluated client's satisfaction of services simply by asking the question if the client is satisfied with the service or not. From all African situation analysis studies client satisfaction has been found to be nearly universal, and a number of reasons have been suggested for this observation. Firstly, it could be that many of the family planning clients have no comparison against which to make a judgment. Secondly, some clients are fearful of providers and an interview with clients within clinic environment yields positive results out of fear. There is also what is known as "courtesy bias" in the survey, where a respondent does not want to be known to say unpleasant things about another person, especially those in a position of authority (Miller et al., 1998).

In Yemen a "situation analysis" study of the reproductive health (RH) programme was conducted in the fall of 1999. Despite the overall relatively low quality of services, the vast majority of clients using the service reported being satisfied,

which possibly suggests courtesy biases or low client expectations as interpreted by the researcher (MOPH et al., 1999).

To overcome these obstacles, researchers are exploring different ways to measure and analyze client satisfaction. Exit interviews can ask clients to report what happened during the consultation rather than to evaluate it (Cleary and Edgman-Levitan, 1997). Simulated, or mystery clients (that is, trained community members who pretend to seek services) can assess client satisfaction, on the arguable assumption that they share actual clients' perceptions(Huntington et al., 1990, Huntington et al., 1993, Schuler et al., 1985) .

A study conducted in Indonesia attempted to obtain credible information on satisfaction by asking for information on events, not opinions, and on the relative importance of the factor served. Unlike previous research where 95% of respondent typically answered they were 'fully satisfied', 28% of the respondents replied that their consultation had not been conducted in private (ranked first important among the non medical factors), 65% said the facility could be cleaner (ranked second in importance) and 19-48% reported not receiving various kinds of information (ranked third) (Bernhart et al., 1999).

### 2.3.5 Quality of care and utilization of services

Quality of care is valued not only for its own sake, but also for its perceived effect on service utilisation. We know from health studies that clients will shun what they perceive as poor quality services despite the proximity of such services (Annis, 1981).

A seminal paper by Jain (1989), for example, provided empirical evidence for the relationship between service quality (defined in terms of method choice) and prevalence of contraceptive use at country level. In another study that links service data on quality to contraceptive use in Peru found that women residing in areas with better services are more likely to be using modern methods of family planning than those in areas of inferior service(Mensch et al., 1996).

People everywhere continually assess the quality of the services that they receive. Given a choice, they use providers and facilities that offer the best available care, as

they perceive it. For example, a study of Egypt's Gold Star programme found a greater increase in client flow over a 2-year period at clinics that met at least 90 percent of the quality indicators. These analyses controlled for the effect of baseline factors, such as clinic location, that influence how many clients seek services at a given facility. Returning clients, who had experience with the quality of clinic services accounted for the difference in client flow (El-Zanaty, 1998).

In Nigeria, family planning clients were asked whether the clinic they were attending was the closest one to their home. Of the 351 women interviewed, 138 (39%) said that it was not. When these women were asked why they did not go to the closer service delivery points, the majority (99 women) said either that the more distant SDP offered better services (88 women) or a wider range of services (11 women). Interestingly, in the last year the facility visited by these 99 women had significantly more users (at $p < .05$) (an average of 766 women) than the facilities visited by the other 252 women in the study (which had an average of 527 users). This suggests that clinics as identified by clients as offering better or a wider range of services are more heavily used(Mensch et al., 1994).

A situation analysis study conducted in Nigeria, Tanzania, and Zimbabwe have revealed a clear pattern of clinic use, in that only a few services-delivery points provide contraceptive services to the majority of new family planning acceptor in the three countries. These raise the question of whether this under-utilization of services is a result of the prevailing levels of quality of services at the clinics. However, in an attempt to explain how clinics with more clients differ from those that are visited less frequently, an analysis of the relationship between the health facility infrastructure and service quality revealed only a weak association between subsystem functioning and use (Mensch et al., 1994).

A recent study about the quality of care and its effect in the utilization of maternal and child health services in Kenya, demonstrate that out of 482 mothers who were interviewed in a household survey, 59.5%, 46.3% and 54.3% of the mothers by-pass the nearest health facility for antenatal, immunization and treatment of their children respectively. The main reasons cited for this by-pass were poor care (21%), lack of drug and supplies (17%) and lack of or poor laboratory services (12%). The study shows a strong relationship between the perceived quality of care and

utilization of MCH services as well as by-pass. The capacity of the facilities to offer care however was not associated with utilization of MCH services or by-pass (Audo et al., 2005).

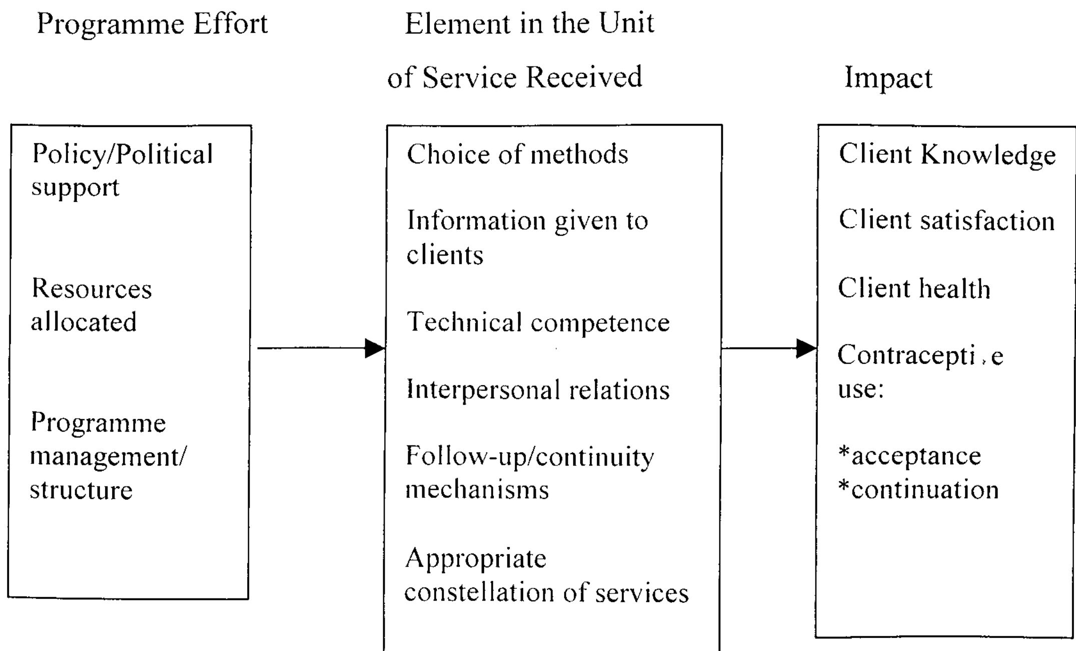
## 2.4 THE MAIN DIMENSIONS OF QUALITY IN FAMILY PLANNING

In 1990, Bruce developed a framework for studying quality of care in family planning services delivery and listed its key dimensions. The framework provided a point of references for those interested in studying quality of care and offered a theoretical structure with which quality, its constituent elements, determinants, and effects, could be viewed (Bruce, 1990).

The framework hypothesizes that quality of care is composed of six elements, which apply mainly to clinical services, relevant to improving the quality of care in family planning programmes: choice of contraceptive methods, information given to clients, technical competence, interpersonal relationships, continuity and follow-up, and the appropriate constellation of services. The analytical framework links the element of quality to programme efforts on one hand and to its client-level output on the other hand. Bruce considers that the six elements reflect *aspects of services that client experience as critical.* Bruce pointed out that the client usually does not see the apparatus behind her experience, in other words, all the vital work required to provide services. Thus, the policies, resource allocation decisions, and management tasks that precede the delivery of services are not directly experienced, but their outcome, the service–giving, is.

The framework is meant to provide an ordered point of departure from which to develop a description of the service unit and define its quality. However, one of the most obvious limitations of the model, as identifies by Bruce is that it does not directly deal with issues of access except in so far as choice assumes access. Figure 2.2 is a graphic display of the framework.

**Figure 2.2: Bruce framework of quality of family planning services**



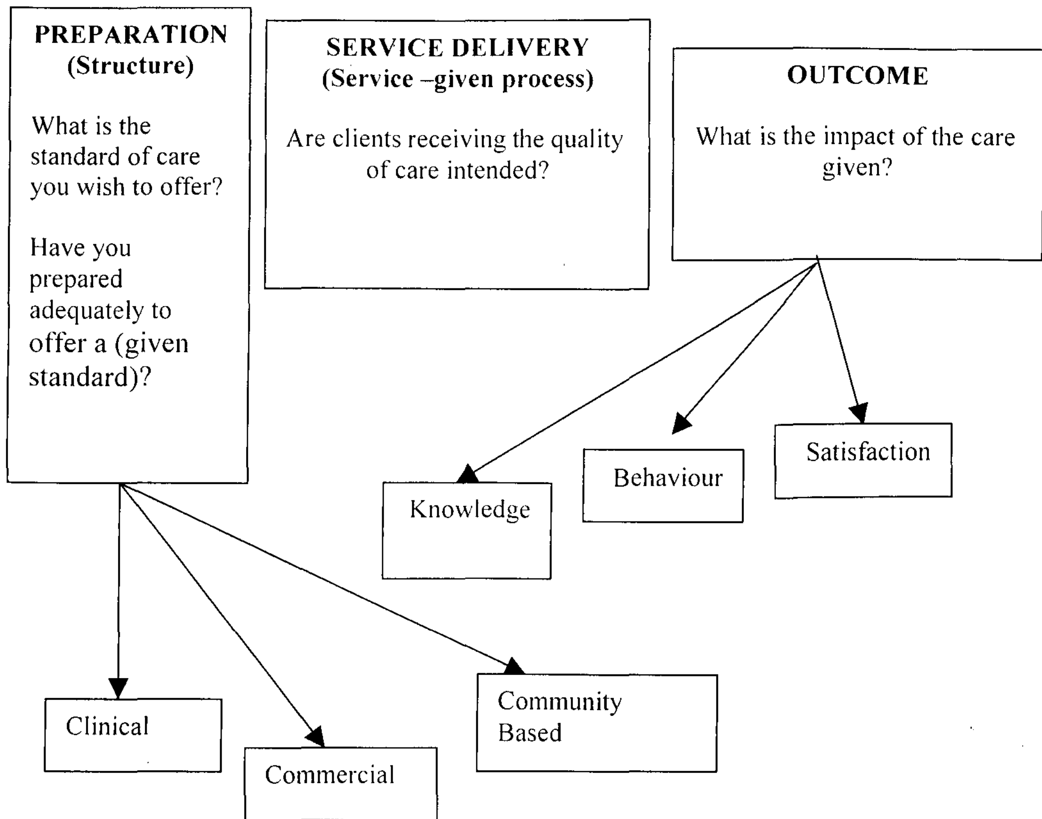

Source: Bruce 1990.

The strength of the framework would seem to be its grounding in the generic conceptualisation of quality in health care proposed by Donabedian (1980). Donabedian (1980), in his seminal work on the quality of health care, identified two dimensions of high-quality care requiring attention; the technical and the interpersonal. Bruce's framework sub-divides Donabedian's technical and interpersonal categories into six elements (Askew et al., 1994).

According to Bruce there are four major questions for service providers that need to be answered:

i) What is the standard of care you wish to offer?
ii) Have you prepared adequately to offer a (given) standard?
iii) Are clients receiving the quality of care intended?
iv) What is the impact of the care given?

**Figure 2.3: Quality issues to be addressed in family planning programmes at the points of preparation, service delivery, and outcome**




**Note: The "Preparation" and "Service Delivery" questions should be asked with reference to the aforementioned six elements; choice, information to users, technical competence, interpersonal relations, follow-up mechanisms, and constellation of services.**
(Source: Bruce Judith 1990, p. 86).

In figure 2.3, Bruce mapped her concerns by listing the six quality elements in the note, and across the top are three different observation points corresponding to Donabedian, namely, structure, process and outcome. Bruce described the three Column displayed in figure 2.3 as follows:

In the 'Preparation" column which Donabedian might call "structure" the first two questions should be answered from the perspective of the six elements. The process might include a review of whether, for example, the facility or programme is well equipped, whether the staff have been trained in both technical and interpersonal dimensions of care, whether the information used by the programme in setting norms is accurate and appropriate, whether supplies and other aspects of logistics

are well prepared, and so on. Assessment to be conducted by management (or outsiders, donors and others), which look at programme effort, would be located at this first "preparation" point.

The preparation required offering clinical, commercial, or community-based services will differ, and so these three sub-categories are illustrated also in the first column.

Background policy factors such as the stated rational for making family planning services legal and available, overall resource allocations to the public sector, and support for choice of methods through import and pricing mechanisms could also be included here as defining to some extent the implicit standards of care and the quality of care delivered.

The second column, "service delivery" is the next logical step after "preparation" (called "process" by Donabedian). Having prepared the programme structure to provide care of a specified quality, what actually happens? Viewing service-giving is difficult because it encompasses so much; establishing a neutral point of observation is almost impossible, and some considerable thought needs to be given to the ends achieved by invading the care-giving process for monitoring or research purposes. Yet, views of the client/provider transaction are essential.

Viewing the service-giving process can help managers know whether the tasks established for their workers are achievable and whether demands made upon them by clients can be matched.

The third column in figure 2.3 represents outcomes. Within this vertical dimension, three encompassing subjects - clients' knowledge, behaviour, and satisfaction - could possibly be viewed along a timeline. Nearer-term outcomes could include clients' knowledgeable use of their method, knowledge of alternatives (including sources), and clients' willingness to return to the provider or to refer to others. Longer-term client-based indicators of the quality of care delivered could include clients' use-effectiveness (at 12 months) with self-employed methods or client's ability over time (for example, 24 months) to manage their own fertility through continuous use of one method or through

switching methods. Ultimately, the longest-term objective would be the clients' ability to attain their fertility – the wanted or unwanted status of pregnancies in the period after first service contact.

Bruce considers each of the six elements as observable (with different indicators) at each of these three points. With regard to choice, for example, an indicator under "preparation" would be the existence of provider norms, availability of supplies, and training staff to offer a balanced choice. At the ' service delivery" stage, direct reports or observations of transactions could reveal whether people were being given sufficient information to make voluntary and informed decisions and whether they had access to the necessary supplies at affordable cost. Under "outcome," a mixture of information derived from questions to individual clients (for example, " Were you offered a choice of methods?" or "Were you offered information on a variety of methods?") and programme - level indicators, for example, the distribution of method choice by clients' age, parity, and reproductive intention) could be used.

Anrudh K. Jain describe this framework as an unusual tool for describing family planning programmes, not simply because of its focus on the quality dimension but also because of its vantage point - the individual client's perspective on service experience. This framework views the individual-level outcome as the consequence of service–giving. It assumes that individuals' knowledge, satisfaction and behaviour can be influenced by specific programme inputs. Furthermore, it is based on the ideal that family planning clients have a right to expect knowledge and satisfaction, and that fulfilling those expectations is the most valued aim of a conscientious manager and service provider(Jain, 1992).

The framework emphasizes the role of the policymakers who are responsible for setting the scene so that the quality dimension as well as the quantity is planned for and assessed. It also emphasizes the role of the field managers who are crucial in making improvements in care, even in the absence of all the desirable logistics and resources (Jain, 1992).

Veny and Hardee agree with Bruce and Jain that any definition of quality must be multi-dimensional, but they express concern that the key dimensions of quality may

be perceived and defined differently not only by clients, but by providers and donor agencies (Hardee et al., 1994, Veny and Gorbach, 1993).

Unfortunately few studies have been conducted that seek to obtain the clients' definition of quality. A study reported by (Vera, 1993) described the clients' definition of high service quality in a clinic in Santiago, Chile, but this study did not compare clients' perceptions with those of the health professionals or related them to the Bruce-Jain framework.

Another argument was that, although the elements of quality as defined by the framework have received broad acceptance in the international family planning community, little empirical verification of the framework has been presented (Veny and Gorbach, 1993, Vera, 1993).

This framework is a helpful tool for researchers who want to assess quality of care, but as Jain asserts, it does not include standards for quality of care. The assumption is that such standards should be developed in the programme and/or country context (Jain et al., 1992).

Since the development of the Bruce-Jain framework, health care specialists have suggested several changes to broaden or modify the definition of quality of care, including the following options:

- Expanding the framework to other aspects of reproductive health services, such as prevention and treatment of sexually transmitted infections (STIs): paying more attention to the health structures that can improve quality of care, such as follow-up and continuity mechanisms (AbouZahr et al., 1996).
- Considering gender relations, both in the population served and between providers and clients (AbouZahr et al., 1996) ;and
- Considering clients' access to family planning and reproductive health services, including the distances clients must travel to reach to the services, the cost of services, the attitudes of providers, and unnecessary client eligibility requirements that may exclude clients based on age, marital status, or gender (Bertrand et al., 1995).

All of these modifications supplement the basic Bruce-Jain framework, placing the client at the centre of the concept of quality of care, whilst also emphasizing the importance of technical standards and of increasing access to information and services.

Another influential framework, developed by the International Parenthood Federation (IPPF) aims to empower clients and motivates providers. The Client and Provider Bill of Rights, created by the (IPPF), outline 10 dimensions of quality that draw from the Bruce-Jain framework, and extends the definition of a client to everyone in the community who needs services, not merely to those who approach the system (Huezo and Diaz, 1993).

According to the IPPF, the client's perspective of the quality of care emphasizes method choice and availability, respectful and friendly treatment, privacy and confidentiality, service provider's professional competence, information and counselling, convenient hours and acceptable waiting times, and affordability.

The IPPF's Bill of Rights also addresses the needs of the providers, including training and updated technical guidance, adequate supplies and strong infrastructure, and feedback and support from clients, other providers, managers, and supervisors.

Nevertheless, the Bruce-Jain framework forms the basis for most of the recent efforts to measure quality of care, including the present study.

## 2.5 HOW TO MEASURE THE DIMENSION OF QUALITY IN FAMILY PLANNING

A wide variety of tools has been developed to measure and assess quality of care in family planning service delivery. Some are used in a comprehensive way, others focus on particular elements of quality, and some are used to diagnose problems, whereas others are employed to propose solutions.

### 2.5.1. Measurement Tools for Monitoring the Situation

The literature concerned with quality assessment has approached the issue primarily from an aggregate, programme-level perspective rather than from a clinic-level perspective (Askew et al., 1994). Several approaches and tools have been used to monitor the effectiveness of FP services:

**I) Demographic and Health Survey (DHS):**

Usually these surveys go under the heading of KAP - Knowledge, Attitude, and Practice. At best theses surveys can only provide information about the potential of couples to use or not to use contraception (their knowledge and attitudes) and about their reported current and past use (Miller et al., 1997).

However, as a guide to programme planning and service improvement KAP surveys may not have been very helpful. Indeed, it can be argued that they have tended to highlight the knowledge, attitudes, and practices of clients as the source of problems for programmes trying to achieve demographic goals, rather than foçusing on the availability, accessibility, and quality of programmes as the source of problems for clients trying to reach their own reproductive health goals. For example, low levels of knowledge of family planning and unfavourable attitudes are often attributed to traditional client's values and low education levels and less frequently to poorly planned and implemented IEC activities, or weak counselling as a result of poor provider training. Similarly, low levels of contraceptive use are often attributed to a lack of inter-spousal communication, male resistance to family planning, or religious values and, less frequently, to a lack of commodities, formidable barriers to access by males as well as females, or poor quality of services at clinics (Miller et al., 1997).

**II) The Service Availability Module (SAM):**

An optional addition to the Demographic and Health Survey (DHS) was the first quantitative tool used in measuring a population's access to reproductive and child health services. The SAM collects information from community members on barriers to seeking care at clinics, and then verifies whether the facilities offer certain basic services (such as immunizations and family planning services).

However, experience with community modules has not always been viewed as satisfactory (Casterline, 1985). In part, one reason for this has been the reliance on knowledgeable informants as a source of information about the facilities and services.

Wilkinson pointed out that knowledgeable informants are not always completely knowledgeable, as they are sometimes unaware of the range of services available at facilities or indeed, even about the existence of particular facilities in geographical areas(Wilkinson, 1991).

**III) Situation Analysis (SA):**

The most comprehensive tool seems to be the "Situation Analysis Approach" as developed by the Population Council in1989, and guided by the Bruce framework. As its name suggests, it is a diagnostic measure of the current situation. The approach looks at performance and the quality of services as provided and perceived by clients in service delivery points (SDPs). A combination of methods is used, including observations of consultations, interviews with providers, exit interviews with clients, a review of service statistics, and an inventory of equipment and supplies. It provides aggregate data on family planning performances to be used by national policy-makers. This research technique involves the random selection of a representative sample of family planning service delivery points and the subsequent application of a standardised and validated set of data collection instruments by trained research teams (Miller et al., 1997).

To date, situation analyses have been conducted in more than 40 countries, most frequently in Africa, and have shown that services often fail to meet the minimal standards of care. A major contribution of situation analysis has been the ability to identify programme weakness in terms of availability, functioning, and quality of family planning services, and suggests interventions to improve programme planning and operations. The advantages of this approach lies in the provision of representative data, its relatively low cost, the comparability of data across studies, and the opportunity it presents to refine a standard set of instruments for both quantitative and qualitative assessment (the structured questionnaires and

observation guide, respectively) (Askew et al., 1994, Mensch et al., 1994, Miller et al., 1998).

While situation analysis is similar to the Demographic and Health Surveys' Service –availability module in that they both attempt to assess the supply –side dimensions of a family planning programme, differences exist in terms of the range, focus, and quantity of the information collected and the method of data collection. One of frequently noted advantage of situation analysis is that data are obtained on the quality of care provided to women by means of site visits to every sampled service-delivery point.

The approach is not intended as a means of assessing service quality only, and consequently, some tradeoffs may occur between the efforts spent collecting data on service quality and that spent gathering information about sub-system functioning and performance. Such tradeoffs may constrain the validity of the data on quality (Mensch et al., 1994).

A disadvantage of this approach, however, is that in locations where contraceptive use is low (for example, sub-Saharan Africa), the research team may fail to observe any such interactions. In situation analyses conducted in Nigeria and Tanzania, at half of the service-delivery points visited there were no new or continuing clients to observe (Mensch et al., 1994).

Also, because the situation analysis approaches revolve around a family planning facility, little information is available on non-clients' perception of facility quality, which may be an important determinant of their failure to utilize family planning services and to practice contraception (Speizer and Bollen, 2000).

Simmons argues that the rapidity of the assessment employed in situation analysis approach may effectively exclude establishing the rapport needed to elicit the insights into programme functioning that is obtainable through longer fieldwork. Ideally, the diagnoses provided by rapid assessment techniques, such as situation analysis, was suggested to be validated by approaches of greater depth that explore the full range of manifest and latent dimensions of client-provider interactions, their determinants and their consequences (Simmons and Elias, 1994).

Simmons and Elias (1994) reviewed different methodologies and methods that have been used in studying client/provider interactions. In their review they noted that surveys have been the dominant methodological tools used in studying demographic phenomena. They also noted the benefits of combining qualitative and quantitative approaches to such studies and argue that the typical example of the inability of survey methods to capture clients' perspectives is illustrated by interviews about client's satisfaction about services (Simmons and Elias, 1994).

### 2.5.2 Data Collection Instruments

Whereas a number of studies have used a variety of tools to measure some aspect of quality, relatively few studies have attempted to measure all the elements of quality in a comprehensive manner. However, the types of data-collection instruments used have largely determined which aspects of quality can be measured.

**I) Use of exiting data**

To monitor a family planning programme, the simplest and least costly is to use existing sources of data, such as clinic registers, or performance reviews, and client suggestion boxes (Diprete et al., 1993). Even if data collection systems were not designed with quality measures in mind, managers used the registers listing clients' scheduled return visits to calculate an important indicator of quality – the proportion of clients who do not return on time(Campbell et al., 1996). However, existing data may sometimes not be reliable or relevant.

**II) Direct observation**

The advantage of direct observation is that the observer can report on both provider and client's actions and their interaction (Kim et al., 1999). However, concern has been expressed about the quality of data obtained from third-party observation. Two points are most commonly made in critique of direct observation. The first has to do with the intrusiveness bias. The second point relates to the subjectivity inherent in measuring quality of care.

### III) Simulated clients

Some researchers have trained community members to observe providers with pretending to seek care (Huntington et al., 1990). The simulated, or " MYSTERY" clients can be recruited from group that face special service delivery problems (for example, ethnic minorities) in order to explore how providers treat different clients (Huntington and Schuler, 1993).

Findings indicate that the "mystery client" or "simulated client" approaches are handy when the client load is low or when too few actual clients fit a particular profile (Leon et al., 1994), or when clients refuse to be interviewed. Mystery clients can also lower the cost of data collection, decrease the level of intrusiveness during a consultation that is caused by the presences of an independent observer, reduce faulty recall, and at the same time capture both the observable and intangible aspects of the care–giving process (Huntington et al., 1990, Huntington et al., 1993).

The disadvantages of the approach include the providers' inability to give informed consent, physical examinations that the mystery clients do not want but may have to undergo, and the unreliable ratings that a single mystery client may give to a provider. These disadvantages can be addressed, for example, providers and programme managers can be informed in advance that they will be visited by mystery clients at some point, thus reducing the lack of informed consent; appropriate selection and training of mystery clients can reduce their exposure to unwanted or poor services; and the use of more than one mystery client can reduce unreliability of the ratings. Research findings suggest that a high degree of agreement exists among different observers concerning the same client-provider interactions, especially on items measuring the provider's physical actions (Huntington et al., 1996).

The principle limitation of the simulated-client design is that the difference between the ratings of the simulated client and her simulated companion may be partially attributed to the role-playing rather than to the inherent unreliability of observation (Huntington et al., 1996).

### IV) Client feedback

Clients have a valuable perspective on the quality of care. First, as members of the community, clients can define culturally appropriate behaviour for example, whether providers should make eye contact or whether long waiting is a burden or a welcome opportunity to socialize. Second, clients generally place more weight on provider's interpersonal relationships, while a trained observer might focus on technical competence. Third, client feedback can indicate whether clients are willing and able to carry out decisions made during consultations. To gauge clients' satisfaction, programmes can solicit clients' opinion in exit interviews, focus–group discussions, satisfaction surveys, and suggestion boxes(Huber, 1997).

Client exit interviews are one of the few tools that provide quantifiable data on client's perceptions. They can provide information on clients' knowledge about such matters as how to use the method they received and these contrasts with direct observation. Although observation is preferred as a means of evaluating provider skills and what information is conveyed and how, it does not reveal how well the information was received or understood.

### 2.5.3 Reliability of information collected by different methods

A growing body of work is available concerning the reliability of information collected by means of different methods. If cost and complexity of data collection are an issue, Bessinger and Bertrand suggest that a choice can be made between two particular instruments, direct observations of client-provider interactions and exit interviews with clients. Their analysis indicates that these instruments provide a fair degree of agreement on a number of indicators of quality of care. Observations can be used for assessing providers' behaviour, and exit interviews can be used to assess clients' perceptions of the services they received (Bessinger and Bertrand, 2001)

On a related issues concerning the reliability of the information collected, recent research from South Africa indicates the exit interviews conducted at health care facilities and focus-group discussions conducted in communities may present

different pictures of service quality, therefore, researchers must call for caution in interpreting result that can vary according to the research methodology employed (Schneider and Palmer, 2002). Reliability issues are especially important in large-scale surveys. Increasingly, an effort has been made in such surveys to solicit information from individuals and communities about their perceptions of the quality of services available to them (Mroz et al., 1999, Speizer and Bollen, 2000).

Speizer and Bollen reported findings from Tanzania similar to those described by Schneider and Palmer. They found that a community's perceptions of quality collected from key informants are related to perceived travel time to the facility and to the availability of specific services. Community reports do not correspond well, however, with data gathered through facility survey about a variety of readiness factors such as contraceptive availability, physical infrastructure, equipment and supplies, services, and personnel (Speizer and Bollen, 2000).

Situation analysis of reproductive health services conducted in Yemen shows that women in focus group discussions were quite critical of the quality of services, especially in the treatment by providers, low levels of technical skills, and fees that were considered too high for poor families. In contrast, policymakers emphasize socio-cultural issues and geographical access, rather than quality of services, to explain the under–utilization of services (MOPH et al., 1999)

Other topics include the extent to which exit interviews with clients can measure their satisfaction with the services they received (Williams et al., 2000). Findings indicate that clients are better able to express their dissatisfaction about waiting time, clinics hours of operation, fee for services, and access to the services to the clinic than about their direct contact with providers.

There was also concern shown about the reliability of observation data. Do different observers interpret the same provider behaviours and actions differently, not only when they are concerned with affective realm, for which judgment of interpersonal exchanges must be made, but also when they are assessing the realm of the technical, for which (presumably) objective standards exist?

The interrater reliability of observational data from a study in Turkey was assessed using teams of multiple observers. Overall, the findings suggest a strong degree of reliability. Observers were more likely to agree when rating physical actions than verbal cues and when both observers were of similar backgrounds. The high degree of reliability in the situation analysis observation guide is considered to be due to a relatively low level of measurement and the use crude indicators for several dimensions of quality. The guide's reliability makes this sort of study particularly valuable to family planning clinicians, programme managers, and policy-makers (Huntington et al., 1996).

### 2.5.4 Measurable indicators of quality

The next step in the process of measuring quality is to make the elements of quality operational, first by identifying measurable indicators for each element, and second, by developing items to measure the specific indicators within each element (Mensch et al., 1994). In this respect, a sub-committee on quality of care of the Task Force for Standardizing Family Planning Performance Indicators encouraged researchers to, "Let 100 flowers bloom", that is, to experiment with different approaches to evaluating quality with the expectation that promising methodologies will emerge from this broad experiential base.

A successor to the task force, the Quality of Care Subcommittee of the Service Delivery Working Group, a group of primarily Untied States–based professionals with experience in assessing quality convened by the EVALUATION Project of the United States Agency for International Development (USAID), proposed a list of 42 core indicators of quality of care, based on the Bruce-Jain definition and researchers have begun to develop and test methods for collecting data for these indicators (Bertrand et al., 1994). (See annex 2.1 for indicators developed by the EVALUATION project.)

In developing the list of forty-two indicators, the Evaluation Project concurred that there are three levels for measuring indicators related to quality: (I) the manager, (2) the provider, and (3) the client. Since a number of indicators can be measured at two or even three levels, it was decided to identify the level at which each indicator was most important and to include the item only once on the list. In most cases this

was at the client level. If deficiencies were found at the client level, then one would need to return to the provider and manager level (enabling systems) to identify the source of the problems.

Thus quality of care in the choice of a method, for example, can be indicated by:

- The range of contraceptive methods in stock (managerial decision),
- Whether providers offer clients all appropriate methods (provider performance), and
- Whether clients received the method of their choice (client preference).

The list lacks indicators on the sixth element of the Bruce framework "Appropriate constellation of services"; i.e. the integration of family planning with maternal and child health, postpartum services or other reproductive health services. Only some indicators on the appropriateness of the family planning services are included.

### 2.5.5 Qualitative method for assessment of quality of care

The study of client-provider interactions benefits from the complementary application of both quantitative and qualitative research techniques. Quantitative approaches which relying primarily on representative surveys, emphasize coverage and the ability to generalize to larger populations. Qualitative methods, using primarily observational techniques and a variety of in-depth interviewing approaches, produce contextual or holistic explanations for a smaller number of cases, with an emphasis on the meaning rather than the frequency of social phenomena (Kirk and Miller, 1986, Miles and Huberman, 1994, Patton, 1987).

Qualitative approaches may provide an opportunity for people to reveal their feelings - or the complexity or intensity of their feelings - about family planning services. Such findings are likely to differ from the more cursory appraisals possible in survey research (Warwick, 1982).

One advantage of using a combination of methods is that some compensation exists for the drawbacks of any single method with regards to its validity and programme relevance. In-depth information sometimes reveals that quantitative findings result in misleading interpretations. For example, the findings from the contraceptive

prevalence survey shows that an increasing number of women have knowledge of modern contraceptive methods, but doesn't specify what kind of knowledge they have. The assumption that their knowledge includes how these methods function may be unwarranted. In-depth ethnographic interviews with Sri Lankan informants, for example, revealed that survey results disguised different forms of contraceptive knowledge, ranging from knowledge based on hearsay, on traditional health beliefs, and on popular health concerns, to that based on biomedical paradigms (Nichter, 1989).

Ideally, while both quantitative and qualitative methods should be used in the study of programme-client interactions, a special case can be made for the importance of qualitative approaches. As (Waitzkint, 1991:51) argues, quantification alone does not address the complexities, context, or underlying themes of discourses; to understand these adequately require "an in-depth interpretive analysis". "The way people talk about their lives is significant, and the language they use and the connections they make reveal the world that they see and in which they act."(Gilligon, 1982: 2).

The appropriate application of qualitative techniques in the study of client-provider interactions does not necessarily require subsequent validation through quantitative techniques, although this approach may sometimes be useful (Morgan and Murgatroyd, 1994).

Moreover, qualitative approaches are not simply exploratory techniques for the development of further quantitative research. An important, and sometimes difficult, challenge in using a combination of methodological approaches is to avoid forcing the data gained from one approach (typically the qualitative) into the analytic framework of the other (typically the quantitative or numerical paradigm). Little reason exists to collect rich, contextual data concerning client-provider interactions if such information will subsequently be reduced to a narrow quantitative interpretation (Simmons and Elias, 1994).

The in-depth interview is aims to elicit the interviewee's perspective, rather than that imposed on by the researcher. According to Marshall and Rossman, the fundamental assumption underlying this approach is that: "the participant's

perspective on the phenomenon of interest should unfold as the participant views it"(Marsall and Rossman, 1995:80).

### 2.6 How has the literature review contribute to the focus of this study?

The review of the literature on quality of care of family planning identifies important issues for further research.

The first is the concern about the definition of quality of care; that is, should the definition be done by the current clients, or by the researchers? On the other hand, perception of both parties is important for a comprehensive evaluation. This study seeks to narrow the gap in knowledge about the comparability and consistency in views between the clients and the researchers. It is hoped that this study will help in redefining quality, operationlizing the important elements and providing the basis for revising the instruments that have been used to collect data.

The second issue is the need for an approach of greater depth that will explore the full range of manifested and latent dimensions of client-provider interaction, their determinants and their consequences. This study is planned to address this issue through a comprehensive complementary quantitative and qualitative approach for assessing the quality of family planning services.

The third issue is the question of under-utilisation of services and variation of utilisation among health facilities. Why do family planning clients choose to use some facilities more rather than others? Determining whether choice of a facility for family planning services is guided by perceptions of the standards of care it provides is important. Non-use of available facilities is often hypothesized to be a result of perceptions of the poor quality of care they provide, and this is a supposition that should be tested.

### 2.7 How has the literature review contributed to the methodology of this study?

The review of the literature helps to explore different methods and approaches for assessment of quality of care of family planning, which helped to guide the methodology used in this study.

A considerable body of research has accompanied the growth in the development of measurement tools. Topics studies range from the appropriateness of various instruments designed to capture different perspectives (those of the client and those of provider), their use under dissimilar circumstances, and the reliability of different instruments to measure quality of care, to the correspondence of information collected by means of various instruments.

Studies that have attempted to define and measure many dimensions of quality of care, as outlined in the Bruce framework, have employed an increasingly diverse set of research methodologies, of which the most widely adapted method was the "situation analysis". The advantages of the situation analysis approach lies in the provision of representative data, its relatively low cost, the comparability of data across studies, and the opportunity it presents to refine a standard set of instruments for both quantitative and qualitative assessment (the structured questionnaires and observation guide, respectively).

The diagnoses provided by rapid assessment techniques, such as situation analysis, was suggested to be validated by approaches of greater depth that explore the full range of manifest and latent dimensions of client-provider interactions, their determinants and their consequences (Simmons and Elias, 1994).

Surveys have been the dominant methodological tools used in studying client/ provider interactions. However a typical example of the inability of survey methods to capture clients' perspectives is illustrated by interviews about the client's satisfaction about services. Combining qualitative and quantitative approaches was suggested to be more appropriate in this regard (Simmons and Elias, 1994) .

The development of the data–collection instruments and of indicators of quality has been an interactive and interrelated process; the type of data collection methods used in the situation analyses approach have determined what indicator can (and cannot) measure and the indicators proposed to assess the elements of service quality have influenced the items included when revising the data-collection instruments.

Both quantitative and qualitative methods are complementary to each other, despite generating different types of data, and when used together as a multi-method approach provided very useful and comprehensive information.

By contrast in the quantitative survey methods, the rich contextual evidence that qualitative approach yields - especially when combined with the insight derived from quantitative techniques - is essential for managers and policy makers interested in improving the quality of care (Simmons and Elias, 1994).

Nevertheless, the questions to be answered should directly influence the choice of research methods or techniques that are to be used in the investigations.

**To sum-up**, this chapter presented a literature review concerning the issues of quality assessment and assurance in the field of health care in general and, more specifically, in the field of family planning services. Special consideration has been given to the main dimension of quality and framework for assessment of quality of care in family planning and how to measure the dimension of quality of care, including the approaches, measurement tools and indicators. The following chapter will present the characteristics of the country in which the study was carried out, and it will shed light on the historical, geographical, economic and demographic features as well as on family planning policy and practices.

# Chapter Three

# COUNTRY PROFILE

## 3. INTRODUCTION

This chapter presents the background information about (Yemen). The first two sections provide an overview of geography, history and political context and demographic features. Section three describes the socio-economic development of the country with an emphasis on gender and development. Section four describes the health care system, the infrastructure and the reform process. Section five provides an overview of the national population policy with reference to family planning policy and programme. Section six provides analyses of the health situation of women and their fertility preference and behaviour. Section six describes family planning in Yemen, including practices.

## 3.1 GEOGRAPHIC FEATURES, HISTORY AND POLITICAL CONTEXT

### 3.1.1 Geography

Yemen is geographically a diversified land. It has high mountainous areas, plains and deserts as well as a coastal strip. Located in the southern part of the Arabian Peninsula, Yemen is bounded by the Arabian Sea and Gulf of Aden in the south, the Sultanate of Oman in the east, the Red Sea in the west and the Kingdom of Saudi Arabia in the north.

Yemen's total land area, excluding the Al-Rub-Al-Khali desert, is 555,000 square kilometres. The climate is temperate in the mountainous regions in the western part of the country, extremely hot with minimal rainfall in the remainder of the country and humid on the coast. Sana'a is the capital city, and other major cites are Aden, Taiz, Hodeida, and al-Mukalla.

### 3.1.2 History and Political Context

In ancient times Yemen's geographical location and favourable natural conditions played an important role in population settlement and the development of civilization in the territory of Yemen. The eras of Mae'en, Hadramaut, and Saba'a are considered to be the first organized political entities in Yemen before the birth of Christ. The Hemyar era flourished later and ended with the Abyssinian invasion in 525 AD.

The most important activities of the people of these regions were agriculture and trade; they invented agricultural terracing on the mountains and erected dams, the most famous of which was the Ma'arib Dam. They also controlled mercantile caravans and roads, which transported commodities from India and East Africa across the Arabian Sub-Peninsula to areas around the Mediterranean Sea (Al-Zoghbi, 1990).

European colonial aspirations in the region began in the sixteenth century, and the British gained its foothold with the occupation of Aden in 1839. British and Turkish domination eventually created the South Arabian protectorate and divided Yemen into two. The Turks (Ottomans) occupied Yemen from the sixteenth century until the beginning of the seventeenth century. The Turks again invaded the northern part of Yemen in 1873.

Turkish forces withdrew in 1918, and Imam Yahya strengthened his control over North Yemen. Yemen becomes a member of the Arab League in 1945 and the United Nations in 1947. Imam Yahya died during an unsuccessful coup attempt in 1948 and was succeeded by his son, Ahmed, who ruled until his death in September 1962.

Shortly after assuming power in 1962, Ahmada's son, Bader, was deposed by revolutionary forces which took control of Sana'a and created the Yemen Arab Republic (YAR). Egypt assisted the YAR with troops and supplies to combat forces loyal to the Imamate. Conflict continued periodically until 1967 when Egyptian troops were withdrawn. By 1968, following a final royalist siege of Sana'a, most of the opposing leaders reached reconciliation (Department of State, 2006).

British influences increased in the south and eastern parts of Yemen after the British captured the port of Aden in 1839. It was ruled as part of British India until 1937 when Aden was made a crown colony, with the remaining land designated as east Aden and west Aden protectorates. By 1965 most of the tribal states within the protectorates and the Aden colony proper had joined to form the British-sponsored Federation of South Arabia.

In 1967, in the face of uncontrollable violence, British troops withdrew and federation rule collapsed. South Arabia, including Aden, was declared independent on November 30 1967, and was renamed the People's Republic of South Yemen. In June 1969, a radical wing of the Marxist National Liberation Front (NLF) gained power and changed the name of the country to the People's Democratic Republic of Yemen (PDRY) on 1st December 1970.

In 1972 the governments of the PDRY and the YAR declared that they approved a future union. However, little progress was made toward unification and relations were often strained. A unity constitution was agreed upon in May 1990 and ratified by the populace in May 1991. It affirmed Yemen's commitment to free elections, a multi-party political system, the right to own private property, equality under the law, and respect of basic human rights. Parliamentary elections were held on 27th April 1993.

However, the thawing of tensions was short-lived. A resolved power conflict broke out between south and north, which was only resolved after an attrition civil war in 1994 and the final defeat of the southern secessionists, but the material cost was devastating. The estimated loss to the economy was 5,500 million US dollars. Yemen, however, has now become more stable(Department of State, 2006).

## 3.2 DEMOGRAPHIC FEATURES

Between 1974 and 1994, the population of Yemen had more than doubled from an estimated 7 million to 15.2 million. According to projections, the population was estimated to reach 18.2 million by the year 2000. The recent population census reported a total population of 19.8 million by 2004.

The population density is about 30 persons per square kilometre. Although still primarily rural, (about three quarters of the population is rural, and much of it is dispersed among more than 100,000 small and isolated settlements), Yemen's population has urbanised at a rapid rate, placing a strain on urban services and leading to the emergence of under-served scatter zones and poor areas around most of the country's major urban centres. According to the 1994 census, 24 percent of the population live in urban areas, which are up from 18 percent in 1988. Sana'a city has been particularly affected by a high urbanisation growth, growing at an annual rate of 11 percent, and the population of Sana'a has more than tripled in size over the last decade.

Available evidence indicates that the republic of Yemen is now in its early stage of demographic transition. For the period between 1988 to 1994, the annual population growth rate has remained very high at 3.5 percent. This high rate primarily arises from high fertility, and high, but moderately declining, mortality rates.

A low life expectancy at birth is about 57.5 years (both sexes combined) and this reflects the prevailing poor health conditions. These conditions look even more appalling when women and children are viewed separately. For instance, the national infant mortality rate is 81 deaths per 1000 live births per annum, with inter-governorates variations ranging from 57 to 107.9. Maternal deaths account for 42 percent of all deaths among women aged between 15–49 years. According to the 1997 YDMCHS, for the decade before the survey, the maternal mortality ratio was estimated to be 351 deaths per 100,000 live births (CSO and MI, 1998).

Migration used to be an important factor in Yemen's population growth. Internationally, intensive out-migration from Yemen, mainly to oil-producing Arab countries, goes back over many decades. Internal migration (predominantly from rural to urban areas) constitutes a main concern because of its impact on the urban population, which is now estimated at 7.2 per cent a year, which is double the rate of natural increase for the country. The 1994 census shows that the major cities of Sana'a, Aden and Al-Hodedia are attracting rural migrants(CSO, 1996).

Yemen's very meagre water supply (less than 130 cubic meters per capita per year, or 2 percent of world average) leaves 90 percent of the population with less than the

minimum standards of domestic water supply. In addition poor access to safe drinking water (only 69 percent of the population) and poor sanitation are daily reminders of poverty, especially onerous for girls and women in rural areas who are often forced to walk for hours every day to collect domestic water. Less than 15 percent of the road network is paved, and much of the network (with the exception of most main highways) is in poor or very poor condition. Electricity reaches only about 45 percent of the population and the generating capacity is falling behind demand. Telecommunications penetration, although increasing very rapidly, is still quite low (telephone line density is only 19 per 1000 people, and internet access less than 1 per 100 people, which is about one-tenth of that of Egypt (World Bank, 2002).

## 3.3 SOCIO-ECONOMIC DEVELOPMENT

### 3.3.1 Economy

Since unification the government has worked to integrate two relatively disparate economic systems. However, the 1990 Gulf War exacerbated an already difficult political and economic situation. Among other things, it led to the repatriation of more than one million Yemeni migrants, with workers representing nearly 10 percent of the population. Their remittances, which formally constituted a significant contribution to the economy, fell by 85 percent within a year (from $2 billion in 1989/90 to around $245 million as from 1991). This was followed almost immediately by the withdrawal of external financial assistance from the Gulf States and other bilateral donors.

Between 1990 and 1994, the country experienced a slow economic growth (3 percent per annum), high inflation (58 percent per annum) and a rise in the budget deficit to 14 percent of GDP in 1994. In response to the economic crisis, the government entered into agreements with the International Monetary Fund to institute a structural adjustment programme. Phase one of the IMF programme includes major financial and monetary reforms, including floating the currency, reducing the budget deficit, and cutting subsidies. Phase two addresses on structural issues such as civil services reform.

However, with a gross national product per capita of US $460, Yemen's 18.5 million people remain, on average, among the poorest in the world, and major constraints for sustainable employment generating growth and good public services stand in the way of rapid improvement in the quality of life of the poor (World Bank) .

The 1998 House Budget Survey showed that 17.6% of the Yemeni population live below the food poverty line, whereas the percentage of the population who are incapable of obtaining all their food and non-food requirements (represented in food, clothing, health, education and transport) is 41.8%. The survey confirmed the relationship between the family size and poverty as evident by the high average family size of poor families, reaching 8.2 people compared to 7.1 for the average family size for the total population. The incidence and depth of poverty are also higher in families with a higher ratio of children to adults (GOY, 2003).

Human poverty is measured by a number of social indicators related to population such as fertility, infant and maternal mortality, and other such measures including illiteracy rates, enrolment in basic and secondary education, access of people to primary health care and potable water, in addition to the percentage of the population who have access to electricity. All these indicators reflect a low level of human development in Yemen amounting to a human development index (HDI) of 0.468, which ranks Yemen 13th out of 162 countries that were classified in the World Human Development Report for 2001, in accordance with the HDI for 1999, thus placing Yemen among other countries with a low human development. Most of these indicators show the urgent need to escape the limitations of access to basic social services, both in urban and rural areas, for males and females, and for the poor and non-poor alike (GOY, 2003).

Government spending in the education and health sectors has fallen in both absolute and relative terms since the early 1990s' with consequent adverse implications for Yemen's human resource development. Government health care spending as a proportion of total government spending is low compared to other Middle Eastern and North African (MENA) and least-developed countries. During the 1990-1996 periods, public health care expenditures averaged 4.2% of the total public

expenditure, compared to 6% for MENA countries and 5% for the least-developed countries(UNCIEF, 1998).

Proportionately, public education spending compares more favourably with otner MENA and least-developed countries, though given Yemen's low enrolment rates and its late start in developing a modern education system, its education sector spending needs are unusually high. Public spending on education as a proportion of total government spending is averaged 18% during 1990-1996, against 15% among MENA countries and 13% among least-developed countries(UNCIEF, 1998) .

### 3.3.2. Gender and development

Gender disparity and lack of women's participation in all public spheres of life prove key challenges for human development in Yemen. The wide gender gap placed Yemen at 131st among 146 countries rated on the gender development index for 1999.

Women are still largely excluded from the economy. The employment rate of women is less than one-third that of men, and this employment is mainly in low–productivity rain fed agriculture and small livestock. The rate of women's participation in the economy did not exceed 22.7% in 2000 as compared to 69.2% for males.

#### I. Gender and legal status

Yemen's constitution (1991) grants equality for men and women before the law and in public rights and duties. The constitution, which was adopted by popular referendum in April 1991, grants equal political, economic, legal, and cultural rights to male and female citizens as well as equal opportunities (Articles 19, 21, 27).

The 1994 constitution declared that Islamic Shariah is "the sole source of all legislation", which established the foundation for the rights of all citizens. Article 31 specifically states that "Women are the sisters of men". Women have rights and duties that are guaranteed and assigned by Shariah and stipulated by law. Some women human rights activists debate this stipulation; especially that sisterhood

culturally means dependency on the brotherhood, thus reinforcing the male dominance of females (Al-Hamadani, 2001).

**i) Right to education**

The right to education is a public guarantee to all individuals under the terms of Article 37 of the Constitution, which stipulates, "All citizens have the right tc education, which the state shall provide through the establishment of various school and cultural and educational institutions. In particular, the State shall cater for the welfare of the younger generation, protect it from delinquency, ensure its religious, intellectual and physical upbringing and ensure appropriate conditions for the development of its talents in all fields".

The adult female literacy rate in Yemen is low, at around 26%, compared to 53% for men, which is the lowest rate and largest gender gap in the Middle East and North Africa (MENA) regions (UNCIEF, 1998). Female basic-level enrolment rates, both in absolute term and relative to male rates, are extremely low in Yemen. There are only 48 girls aged between 6-15 years enrol in school for every 100 similarly-aged enrolled boys, which is the lowest female to male student ratio in the world (UNCIEF, 1998). At secondary level, the gross female enrolment rate is only nine percent, which is again one of the lowest in the world.

This high rate of illiteracy means that Yemeni women are being denied access to many of the key areas of knowledge and skills needed for their effective participation in community life, for their involvement in decisions and in decision-making structures affecting them, and even for meeting their basic health care needs and attainment of reproductive goals.

**ii) Right to health care**

Article 37 of the Constitution regards health care as a right for all citizens, in accordance with which "the State shall guarantee through the establishment and expansion of various hospitals and health institutions. The law shall regulate the medical profession, the expansion of free health services and the promotion of health awareness among citizens".

Yemeni women do not generally enjoy the right to adequate health care. This is particularly the case with respect to maternal care. Attendance rates for pre-natal care in Yemen are very low; only around one-third (35%) of mothers have a medical consultation from a doctor, nurse or midwife prior to delivery(CSO and MI, 1998).

Yemeni women also lack both the freedom and the knowledge to regulate their own fertility. YDMCHS (1997) found that while 48% of married women aged between 15-49 years wanted no more children, only 21% were using any form of contraception at the time of the survey. In a more detailed look at attitudes towards family planning, found that the major reasons cited by women for not using contraceptive were religious prohibition (17%), husband's disapproval (9%), and lack of knowledge (8%).

**iii) Participation in public life**

The General Electoral Act No.41 of 1992 accords every male and female Yemeni the right to vote and stand as a candidate in elections. Article 3 of this Act stipulates "every citizen who has reaches the age of 18 Gregorian years shall enjoy the right to vote."

Women occupy only one of the 301 seats in Parliament. As a result of this limited participation, women's concerns are generally a marginal issue when laws, policies and programmes that affect their well being are planned and implemented.

Women voters witnessed an increase from 16% in the 1993 elections to 38% in the 1999 presidential election. Their role has become apparent and important to political parties who attempt to attract this sector by giving more space to women in leadership and opportunities. Women's recent involvement in the first local council elections, thirty-five women were elected, some of them even in conservative governorates.

There are many gender sensitive laws, which value women's reproductive roles such as Labour Law. It is also worth mentioning that the civil service has a very clear and equitable wage scale based on qualifications and years of services.

However, gender inequalities do arise within the bureaucracy in terms of promotions, missions, appointment levels, etc.(Al-Hamadani, 2001).

**II- Government response regarding gender issue**

Yemen has ratified many international conventions and the convention that still marks debate is CEDAW (Convention on the Elimination of all forms of Discrimination Against Women), which was ratified in 1984 by the southern government and become bound after unification. Additionally, a delegation from Yemen attended the Fourth World Conference in Beijing that resulted in the Beijing Platform Action, which directly addresses gender inequalities in legal, political, economic and social spheres. The government has approved a national strategy for women based on this platform and have submitted reports required to comply with CEDAW and the Beijing Platform(Al-Hamadani, 2001).

A government body has been established to promote women's advancement in all spheres of life. The Women's National Committee consisting of twenty-one members was formed in 1996 and is headed by a female leader. In 1999, the Committee was upgraded to High Supreme Council for Women headed by the Prime Minister himself. The daily work was entrusted to a general secretariat, also headed by a female.

The Women's National Committee was also retained within this restructure as an advisory group and expanded its membership of all the ministries, political parties, private sector, and civil society. Above all, networking women's issues internally and externally is a major goal. This organization has the mandate to develop policies, strategies, and plans for women's advancement and has a budget from the government. Since it's inception, it has embarked in recording women's advancement in various sectors, raising awareness, gender mainstreaming, advocating for women's issues and concerns, monitoring violence against women, implementing studies and research to stand on the status of women, identifying gaps, reviewing laws, and mobilizing resources (WNC, 2005).

All this has opened up the way for comprehensive reforms regarding the status of women in the country. Nevertheless, many cultural traditions still shackle women. The most pausing barriers against women's advancement are the unwritten,

customary laws. Women's mobility outside the home is greatly restricted, and they have little access to or control over, family resources and economic opportunities, legal protection or political participation.

## 3.4 HEALTH CARE IN YEMEN

### 3.4.1 Health System organisation

The public health sector in Yemen is constructed around the concept of primary health care (PHC) providing health care services delivered via a traditional three-tier system comprising of primary, secondary and tertiary level services(MOPH, 1998).

The primary level of care consists ideally of health units and centers. Within this system, the health units provide services to all villages within their catchments area, with each catchments area consisting of 3,000-5,000 population. The health unit is staffed by community midwife/female PHC workers and a male PHC worker/nurse. The health unit provides MCH/FP services and simple curative care with a focus on preventive care. The primary heath care centres supports the health units, and each centre is designed to cover 15,000 people, staffed with 1-2 physicians, a medical assistant, and four community midwives/female PHC workers and other technicians. The heath center provides diagnostic, preventive, and curative services, as well as training and supervision to the lower-level primary health care units.

The secondary level consists of the district and government hospitals, all of which serve as a first line of support to the PHC facilities. More specifically, secondary level facilities treat patients that cannot be properly cared for at the PHC centre and units; and offer inpatient diagnostic facilities and specialized health interventions in obstetrics and gynecology, pediatric, general medicine and surgery. District and governorates hospitals also provide preventive services such as MCH/FP as part of outpatient services. In addition, secondary health care facilities provide training and guidance to PHC workers; organize logistic support and help medical students gain field experience.

The tertiary level of facilities consists of major urban-based hospitals that also serve as teaching hospitals for the medical faculties of Sana'a and Aden universities. These hospitals have highly trained staff and provide a progressively wider range of specialized medical interventions that are beyond the capacity of the secondary level facilities. The hospitals also provide preventive services such as antenatal care and family planning services as part of the outpatient clinic services. The tertiary level hospitals represent the top of public health care and also serve as teaching hospitals for medical students.

The 1998 health facilities survey found that family planning services are offered in 72 percent of hospitals and 60 percent of health centers, but in only 11 percent of primary health care units (MOPH, 1998). It is estimated that 45 percent of the population has access to health services; 35 percent in rural areas and 68 percent in urban areas (MOPH, 1996).

The MOPH provides family planning services that are integrated with primary health care services through its hospitals (outpatient clinics), health centres and health units.

The directorate of reproductive health in the MOPH&P is responsible for reproductive health and family planning services for which it receives support from several donors. The directorate organizes frequently in-service training in the area of reproductive health/FP for family planning service providers of public health facilities as well as the NGOs. The directorate is responsible for supplies of contraceptive to the health facilities services as well as supervising and monitoring their activities.

According to the findings of a situation analysis of reproductive health services conducted in Yemen in 1999, a wide variety of personnel, both male and female, staff the SDPs visited. These include obstetrics/Gynecology (obs/gyn) physicians, general practitioners, medical assistants, nurses, nurse-midwives, qualified midwives, community midwives, and primary health care workers. Among the physicians, obs/gyn physicians are predominantly female. Urban facilities are more advantaged in terms of the proportion of providers to clients and the availability of

female practitioners, especially with respect to those who provides obs/gyn services.

An urban-rural comparison indicates that, contrary to the general expectations urban SDPs have a much better infrastructure than the rural SDPs, urban rural differences were not very large, and on some dimensions rural SDPs were found to have better infrastructure characteristics. More urban SDPs have running, piped water, electricity, and working toilets, however more rural SDPs have sufficient seating in the waiting area and sinks in the family planning and delivery rooms (MOPH et al., 1999).

The official working hours for the government facilities is between 8am to 2pm, six days a week. Most of the facilities are open between 8am and 1pm, six days per week and, in most of the facilities, staff began seeing clients by 9am. However, in the NGOs clinic the working hours are also from 8am to 2pm, six days a week, but providers are restricted to the working hours. The NGO providers have similar types of training as the government providers, although they are more advantaged in terms of salary rates.

The central MOPH charges nominal fees for the use of the government services. These fees are collected at various levels of the MOPH health system, and are submitted to the national treasury. Additional fees are levied at the health centre level for local retention and use. The government as well as the NGOs charge nominal fees for the family planning methods, for example, one cycle of contraceptive pill costs between 10-20 Yemeni riales (YR), while the IUD insertion cost between 50-100 YR (US $1 = 135 YR).

The government health system has witnessed a noticeable expansion over the last decade. The number of health units has expanded from 912 to 1,821, the number of health centre have rises from 392 to 574, and the number of hospitals have increased from 74 to 116 with a bed capacity of over 11,000. The number of doctors during 1995-2000 also rose by an average rate of 7.3% per annum, and the number of nursing staff rose by 6.7 %. However, the number of people per doctor is still 4,810, whereas for the nurses it is 2,400 people per nurse, and the number of people per hospital bed is 1,664. These rates are, by any standards, considered very poor,

even when compared to developing countries and other Arab States such as Syria and the Sultanate of Oman, where the same comparative figures are seven times higher than they are in Yemen (GOY, 2003).

The population per health facility ratio is much higher in the urban governorates of Sana'a compared to the other major urban governorates. This reflects the fact that there are few government health centers in Sana'a city and Sana'a residents must therefore rely on tertiary care facilities for outpatient visits.

### 3.4.2 Source of supply of contraceptive

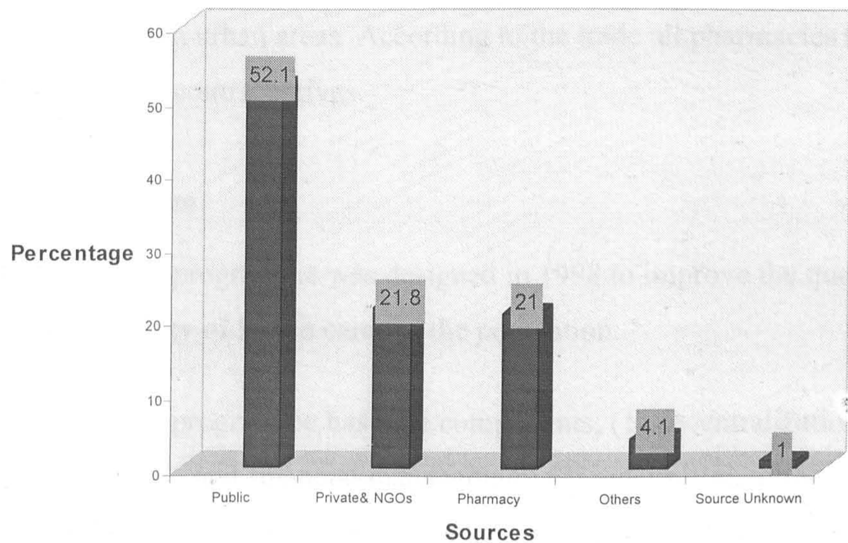
The identification of sources of contraceptive methods for current users is important in order to evaluate the role played by various providers of family planning services and supplies in the public and private sectors. Yemen has permitted the importation and use of contraceptive for health reasons for many years. Imports are approved by license granted by the Supreme Council on Drugs (SCD) in the Ministry of Health and are duty free. The sources of supply are:

- The Ministry of Health using supplies provided by the United Nation Population Fund (UNFPA).
- The Yemeni Family Care Association using supplies provided by International Planned Parenthood Federation (IPPF) and UNFPA.

The public sector is a major provider of family planning in Yemen. In 1991-1992 it provided contraceptive to 57 percent of users. However, in 1997 this figure dropped to 49 percent. General hospitals (28 percent) and MCH centres (13 percent) are the main public sources. Among private sources, pharmacies provide contraceptive to 21 percent of users while private doctors provide methods to 14 percent.

According to the most recent survey (YFHS, 2003), the public sector provided methods to 5 of 10 users of modern methods. Private sector and NGOs also play a major role in providing modern methods to those who want to regulate their fertility, private doctors together with NGOs provided contraceptives to approximately 22 percent of users and private pharmacies to 21 percent (see Figure 3.1).

**Figure 3.1: Sources of Family Planning among current users of modern methods**




Among the non-governmental organizations (NGOs), the Yemen Family Care Association (YFCA) is the major NGO for provision of family planning services in Yemen. The Association has been in operation since 1976 as an affiliate of the International Planned Parenthood Federation (IPPF). Until 1986, when the Ministry of Health started to provide family planning services, the YFCA was the main source of supply of family planning services. YFCA major activities are provision of contraceptive supplies and MCH/FP services in its four clinics in Sana'a, Taiz, Al Hodeada and Aden, distribution of contraceptive to private, NGOs, and MOPH facilities, by 1992 it supported 126 service points throughout the country increasing to 234 service points by 1996.

The Association receives financial support from IPPF, as well as funding from a number of other donors, including UNFPA. In addition, it charges a small fee for the contraceptives it supplies. The Association enjoys governmental support since it ensures the most of service delivery in the country, and complements public units in remote areas (Soghyroun, 1996).

The size of YFCA's clientele (1711, 000 in 1995) grew over 20 percent per year between 1992 and 1995. It appears to be a well administered organization which has capacity for additional expansion (World Bank, 1997).

Physicians' offer public health facilities in the mornings and they are free to operate a private practice in the afternoons. Pharmacies and drug stores are located next to all health centres and hospitals and are also widely distributed in market towns and large villages as well as in urban areas. According to the trade all pharmacies and drug stores has stocks of contraceptives.

### 3.4.3 Heath sector reform

The health sector reform programme was designed in 1998 to improve the quality, efficiency and accessibility of health care for the population.

The health sector reform programme has nine components; (1) decentralization of planning, decision making and financial management; (2) redefinition of the role of the public sector with a stronger emphasis on policy, regulation and public health and the establishment of limitations on its role as service provider; (3) district health system approach; (4) community co-management of health systems; (5) cost sharing (with exemption for the poor); (6) essential drugs policy and realignment of the logistics system for drugs and medical supplies; (7) decentralized, outcome-based management system from the central to the community level; (8) hospital autonomy and eventual basic health facility autonomy; and (9) encouragement of responsible participation by the private sector and non-governmental organisations (NGO's) through appropriate policy design regulation (GOY, 2003).

Civil service reform in Yemen is underway with the goal of streamlining government, enhancing human resource management and implemented labour force adjustment. The district health system has been implemented in some districts, and an essential service package for the district health system has been defined. The MOPHP is currently in the process of restructuring in order to be more adaptive to its new role in the health sector reform. The role of the government is being redefined in line with civil service reform and health sector reform strategy. It is recognized that there is a growing role for the private health services, yet progress on health sector reform has been slow and uneven so far (Haran et al., 2004).

## 3.5 THE NATIONAL POPULATION POLICY

### 3.5.1 Family Planning in the Population Policy

The early 1990's focused the government's attention on addressing rapid population growth. Three National Population Conferences have been held, one in 1991, the second in 1996 and the third in 2002, and these conferences have helped to focus public attention on the problems of the rapid population growth in Yemen. In 1991 the Government formulated its first population policy document where a set of quantitative objectives were adopted to be achieved by the year 2000.

Recognizing that the high fertility and rapid population growth hinders national development, in 1992 the Government of Yemen established an inter-ministerial and inter-sectoral National Population Council (NPC) which was chaired by the Prime Minister and established to deal with population issues, especially with the problem of high fertility. The NPC includes the leadership and involvement of ministers from various ministries. Its functions include developing policies and targets, as well as monitoring, coordinating, and follow up of programme achievements through its technical secretariat.

The National Population Policy considered family planning as the most direct and timely available option for regulating fertility, curbing population growth rate, upgrading women's status, and improving maternal and child health. Quantitatively, this policy aims at raising the contraceptive prevalence rate from below 5 percent in 1990 to 36 percent by the year 2000.

The core objective of these policies is to lower the high rates of fertility and mortality especially among infants and under 5 children, to attain an acceptable population growth rate, to achieve meaningful development with available resources, and improve the living standard of the Yemeni people.

### 3.5.2 The Updated National Population Policy

In order to achieve a balance between social and economic development and also population growth, the updated National Population Policy (2001- 2025) covers a wide range of aims including: empowering women and promoting gender equity; to

provide health care services including family planning; to ensure freedom of reproductive choices within the context of responsible parenthood and the right of married couples to determine the number of children they would like to have, with a birth spacing of their choice.

Accordingly, the National Population Policy aims to realize the following:

- The intensification of national efforts to expand choices, services and information for couples in order to regulate fertility so that TFP may reach 4 live births by the year 2015 and less than 3.3 by the year 2025.

- A rise in contraceptive prevalence reaching 56 percent by the year 2025, with modern contraceptives constituting at least 35 percent of all methods.

This target would be reached through supporting the principles that give couples the right to choose the number of children they desire, the right to prolong child spacing, and the right to infertility treatment, provided that abortion is not considered as a family planning method.

### 3.5.3. The National MCH/FP Programme

In order to put all the national efforts in an integrated and complementary fashion and to accelerate the supply of and demand of family planning services, there were a need for and viability of establishing a national family planning programme.

As a response to this need the National Population Council General Secretariat (NPC/TS) made arrangements, which led to the formulation of an integrated national MCH/FP programme, in response to the resolution adopted by NPC Second Assembly on 20th November 1995. The resolution entailed the development of a comprehensive framework for an integrated national MCH/FP programme, addressing the major issues and problems of targeted Yemeni population, and coordinating task force was formulated to that end. The main responsibility of the task force was to undertake necessary measures to develop the named programme within the assigned period of time.

In early 1996, the established National MCH/FP programme was endorsed as one of the important components of the National Five-year Development Plan (1996-2000) for the country. This component was intended to be strengthened and sustained throughout the next Five-year Development Plan (2000-2006), thus ensuring its development and continuity.

The national programme for MCH/FP aims to achieve the following objectives by the year 2006:

- Attain a contraceptive prevalence rate of 35.7 percent
- Ensure that family planning services are provided at all health facilities
- Improve family planning knowledge to 100 percent
- Provide antenatal care to 75 percent of pregnant women
- Increase tetanus immunization coverage to 50 percent for women of reproductive age
- Increase delivery of care by medical assistants to 65 percent.

This National MCH/FP programme and the National Population Policies are based on and guided by Islam's human values and principles, and by internationally recognised human rights. To mention but a few:

- Everybody is eligible to enjoy the right and liberties as stated by the International Declaration for Human Rights, without discrimination.
- Every citizen is eligible to enjoy the highest possible standard of health including access to all forms of health care delivery system covering reproductive health, family planning as well as the right to be treated from infertility when possible.
- Every married couple is eligible to decide freely and responsibly the timing and number of children they would like to have. All related Gov and NGO (private and public) are obligated to assist in making available and accessible information, consultations and services related to this issue.
- There is no one ideal FP method, although suitable methods can be found or selected for any mother according to her overall health condition and age. Therefore every effort should be made to provide a wide range of contraceptive and FP methods to expand and raise FP practices.

- Sterilization and abortion are excluded as FP methods to be adopted by the programme.

## 3.6 WOMEN'S HEALTH AND THEIR REPRODUCTIVE BEHAVIOUR AND PREFERENCES

### 3.6.1 Maternal Morbidity and Mortality

The government of Yemen is a signatory of the Millennium Declaration and is one of 10 countries chosen for the UN Millennium Project. Already there is an officially recognized target to reduce maternal mortality ratio to 212/100,000 live births by 2015. This commitment to maternal health is articulated in policy documents including the Population Policy, Poverty Reduction Strategy Paper (PRSP), and Yemen Vision for 2020, and the Reproductive Health Strategy.

According to the 2003 YFHS, an estimated 365 women per 100,000 live births die as a result of complications of pregnancy, childbirth and post-natal period making maternal deaths the leading (42%) cause of deaths among women of reproductive age in Yemen. The data reveals that 18 percent of deaths occurred during pregnancy and 82 percent occurred during the delivery and postpartum period. Only 16 percent of births took place in health facilities while 84 percent were attended at home, mothers and mother-in-laws assisted in 48 percent of births, and relatives or friends assisted in 14 percent. Qualified attendants helped in only 10 percent of the deliveries (MOPH&P et al., 2004).

The data also shows that 58% of the deaths were among mothers in the age groups between 15-25 years, while those over 35 years constituted 25% of the cases. The average number of live births among these women was 4.3, and 37 percent of the mothers had more than 5 children. Only 8 percent of the mothers had ever used contraceptives.

The direct causes of mortality were haemorrhage (45.3%), fever (40.4%) and the remainder were loss of consciousness and convulsions. The data shows that 57 percent of the mothers suffered from ill health including malaria in 30% of the cases, high blood pressure (13%), tuberculoses (6.3%), hepatitis (15%), and other causes including heart diseases and asphyxia.

The care that a woman receives during pregnancy and at childbirth reduces the risk of illness and death for both mother and the child, yet the majority of Yemeni mothers do not receive antenatal care. Women reported receiving antenatal care from trained medical personnel in only 45 percent of births in the five-year period before the survey, with an average of 3.2 visits during pregnancy. The level of regular antenatal care is more common among births to urban mothers and mothers with secondary or higher education.

The data also shows that the percentage of women who had miscarriage or abortion at least once during the five years preceding the survey was 13% and 60% of these abortions happened in the first trimester. Tetanus toxoid vaccinations are given to mothers during pregnancy to prevent neonatal tetanus, which is a frequent cause of death for young infants. Mothers had at least two tetanus toxoid injections for only 31 percent of births in the five years before the survey.

The overwhelming majority of Yemeni children are born at home without assistance from trained medical personnel. Overall, a qualified attendant assisted in 25 percent of the births in the five-year period before the survey. Twenty percent of these deliveries took place in a health facility, and only 13 percent of women received postpartum care. Thirty-nine percent of births not delivered in a health facility were delivered at home because mothers consider home a better place for their children to be born. However, 40 percent of births did not occur at a health facility because services were not available, were too far away, or were too costly.

Poor maternal health care contributes to most of the prenatal and neonatal mortality. The estimated neonatal mortality rate is 44/1000 live births, accounting for nearly half (45%) of the infant mortality rate (98/1000) and nearly one third (31%) of under five mortality (138/1000) (MOPH&P et al., 2004).

### 3.6.2 Female Circumcision

The 1997 YDMCHS has shown that 23 percent of women questioned were circumcised. In the 2003 YFHS fifty-six percent of the respondents reported that

they had heard of female circumcision. At least 22 percent of women of reproductive age had undergone female genital mutilation, which might leave them with severe risks of infection, haemorrhage, and obstructed labour.

The practice of female circumcision is less common among urban women (33%) than rural women (41%). In addition, among women who have daughters, 22 percent of mothers reported that at least one of their daughters had been circumcised. The data shows that 32 percent of women still favour continuation of the practice. In response the Ministry of Public Health has issued a decree prohibiting the performance of this operation in any health institution in the country (MOPH&P et al., 2004).

### 3.6.3 HIV/AIDS, Sexual Transmitted Diseases (STDS) and Reproductive Tract Infections (RTIs)

The prevalence of HIV in Yemen has not yet been determined. Nonetheless, the available information suggests a rapid dynamic. The number of HIV/AIDS cases officially notified to the National AIDS Programme (NAP) was 1,549, as of September 2002. The UNAIDS estimate of the number of adults and children living with HIV/AIDS in Yemen for 2002 as 11,227 (GOY, 2002).

During December 2002, the cabinet approved the National Multisectoral HIV/AIDS Strategy document. This document provides guidance and government policy backing for HIV/AIDS interventions, including among high risk and vulnerable groups, and condom promotion (GOY, 2002).

Knowledge about HIV/AIDS seems to be low among Yemeni women. In the 2003 YFHS, respondents were asked if they had heard of HIV/AIDS and approximately 44 percent of women mentioned that they had heard of HIV/AIDS. A higher proportion of urban women had heard of HIV/AIDS and, compared to their rural counterparts, where the proportions were 77% and 33 % respectively. However, a high level of awareness does not reflect the detailed knowledge about the disease. All respondents who were aware of HIV/AIDS were asked about the specific ways of transmission and prevention from HIV/AIDS.

A high percentage of respondents identified sexual intercourse as a mode of transmission (85%). Blood transfusion as mode of transmission was identified by approximately 38 percent, contaminated needles were identified by 18.2 percent, however only 7 percent of respondents could identify the mother-child transmission (MOPH&P et al., 2004).

Condom is a key to preventing the spread of HIV/AIDS and sexually transmitted infections, together with sexual abstinence, postponement of sexual debut, and mutual fidelity. The survey shows that there is a very low recognition among Yemeni women of the major preventive roles of condom in fighting HIV transmission. As the data reveals, respondents recognizing condom use as HIV/AIDS prevention method ranges from 1.3 percent of rural women to 5.8 percent of their urban counterparts. Even among educated women only 12 percent of those who complete secondary education know the preventive role of condom from HIV (MOPH&P et al., 2004).

According to the 2003 YFHS, the knowledge of respondents about STDs is still low. Only 10 percent of ever-married women aged between 15-49 years, identify syphilis as an STD (22% among urban women and 6% among rural women), 12% identify gonorrhoea (22% urban and 8% rural). The women were also asked if they suffered from any STDs during the 12-month period before the survey and 7.2 percent reported having symptoms indicating RTIs, and the most prevalent diseases were mycosis (3.3%), gonorrhoea (2.7%) and syphilis 1.8 %. The data shows that among those who mentioned that they have any of these diseases only 52 percent were seeking medical care, 39 percent did not seek any medical help, and 11 percent sought help from pharmacies, traditional healers, and Traditional Birth Attendants.

For those who did not seek medical care the reasons were: 54% thought costs were too high, 34% said the services were not available, 32.6 percent mentioned that they were embarrassed in seeking services, and 10 percent considered the problem as "normal" and therefore did not need medical consultation. Those who mentioned that they have had an STD were asked if their husband sought medical care, and 19 percent only said that the husband did seek medical care, while,

6 percent acknowledged that they did not tell their husbands they had the diseases (MOPH&P et al., 2004).

### 3.6.4 Poverty as a hindering factor for accessing basic health services for women

Although all women face an equal risk of a maternal complication, it is the poorest women who bear the highest mortality and morbidity burden. For example, service delivery data disaggregated by income illustrates very low utilization by the poorest women, e.g. delivery attendance by a nurse, midwife or doctor of only 6.7% among the poorest rural women compared to 32.7% of rural women in the wealthy group. The data also illustrates how the high cost of services contributed, to a large extent, in preventing poor women getting the most basic health services (see Table 1).

**Table 3.1: Cost of health services and health seeking behaviour for Yemeni women**

| High cost as a hindering factor for seeking care | Percentage of women |
|---|---|
| Ill health during pregnancy | 37% |
| Postpartum care | 14% |
| Post-abortion care | 36% |
| Care for STDs | 54% |
| Use contraceptive method | 3% |
| Infertility problem | 30 % |

**Source**: YFHS, 2003

### 3.6.5 Fertility Behaviour and Preference

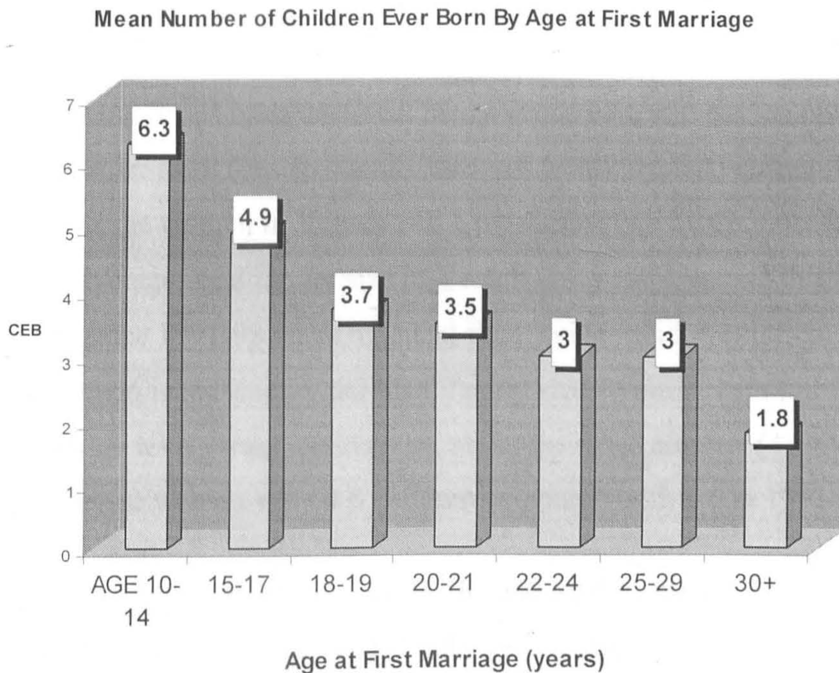
Marriage and motherhood are highly valued social processes for women in Yemeni societies, and this is reflected in patterns of early and near universal marriage and in high fertility rates. Marriage often translates into immediate childbearing as women and their families are anxious to prove the fecundity of the

newlywed. The pressure continues through the childbearing years for many women, particularly until the desired number of children is achieved. Early marriage leads to early childbirth, and according to the 1997 YDMCHS, half of Yemeni women aged between 25-49 years have had their first birth before the age of 20. One in six women aged between 15-19 (16 percent) is already a mother or is pregnant with her first child.

Young age at marriage tends to lead to young age at first birth. Pregnancy and births to these women increase the risks to life and health of both mother and child. The early age at first marriage also contributes significantly to high level of fertility.

Figure 3.2 illustrates this effect by displaying the number of children born by age at first marriage.

**Figure 3.2**:




Source: YFHS, 2003

The survey results indicate that fertility in Yemen has declined steadily but slowly from 7.7 births per woman in the 1991-92 Yemen Demographic Maternal and Child

Health Survey (YDMCHS) to 6.5 births in the1997 YDMCHS and to 6.2 births per woman for the five years prior to the 2003 YFHS survey. Differentials in fertility by place of residence and education are substantial. In urban areas, the total fertility rate is 4.5 births per woman, more than two children lower than the rural rate (6.7 births). Illiterate women have a much higher TFR (6.7) than women with secondary education and above who have a TFR of (2.8).

Son preferences are strong in Yemen but this must be understood in its social and cultural context. Boys are prized because they offer a promise of support and security to their parents in their old age. Girls, once married, owe their allegiance to the husband and his family, and are not expected to contribute to their families of origin.

The 1997 YDMCHS data shows that Yemeni women desire to have both boys and girls but, as family size increases, the desire to have a son increases more rapidly than the desire for a girl. For example, among women with four children, 83 percent who do not have a son want a son, whilst 64% of women with no daughter want a daughter.

Although fertility levels have declined, many women are still having more children than they consider ideal (desired family size is 4.6 children). At current fertility levels, the average woman in Yemen will have almost two births more than she desires. The average ideal family size in Yemen is 4.5 children and this has declined substantially since 1991-92 when the ideal family size was 5.4 children. The younger a woman is the smaller her ideal family size. Women with primary or higher education levels want, on average, about the same number (4 children) as in 1991-92; illiterate women want 4.6 children compared with 5.6 in 1991-92.

A comparison of the total fertility rate (TFR) and total wanted fertility rate indicates the potential demographic impact of avoidance of unwanted births. If all unwanted births could be prevented, Yemeni women would have an average of 4.6 children in her lifetime or almost 2 children less than the current rate.

Regarding fertility preference of Yemeni woman, overall two in four currently married women wants to have more children. However, almost half (49 percent) of

women do not want any more children, which has increased from 36 percent in 1991-92. Over half (55 percent) of women in urban areas do not want any more children, compared with 47 percent of rural women. The proportions were much lower – 47-34 percent, respectively - for the1991-92 survey.

Urban women were more likely to report that they wanted to cease childbearing than rural women (55 percent versus 47 percent). Also, half of women who are illiterate, and around 40 percent of those with less than secondary education want to cease childbearing. The lowest percentage of women who want no more children by level of education is among women who have completed secondary school or have higher education (37 percent), probably because they marry later and start childbearing later and have not yet completed their family. Almost half of husbands of illiterate women compared with 32 to 39 percent of husbands of other women want more children than their wives.

The 1997 YDMCHS data shows that more than one in five births were reported to be unwanted, and almost the same proportions were mistimed (wanted later) and only 55% were wanted when they occurred. One–third of births of order four or higher order were considered to be unwanted by respondent (CSO and MI, 1998).

## 3.7 FAMILY PLANNING IN YEMEN

### 3.7.1 Knowledge, attitude and practice of contraceptive

The 1997 YDMCHS shows that the knowledge of fertility regulation has increased dramatically since the 1991-92 survey. In 1997, 84 percent of currently married women reported having heard of at least one method of family planning and 79 percent reported knowledge of a modern method. In 1991-92, the figures were 60 percent and 53 percent respectively. The increase was particularly marked between rural woman and illiterate women. The proportion of women who know of a place where family planning services are available has doubled since 1991-92, from 27 to 53 percent.

Although the level of contraceptive use is still very low in Yemen, especially compared with neighbouring countries, it has doubled in the period from 1992 to 1997 from seven to 13 percent (for all methods except prolonged breastfeeding).

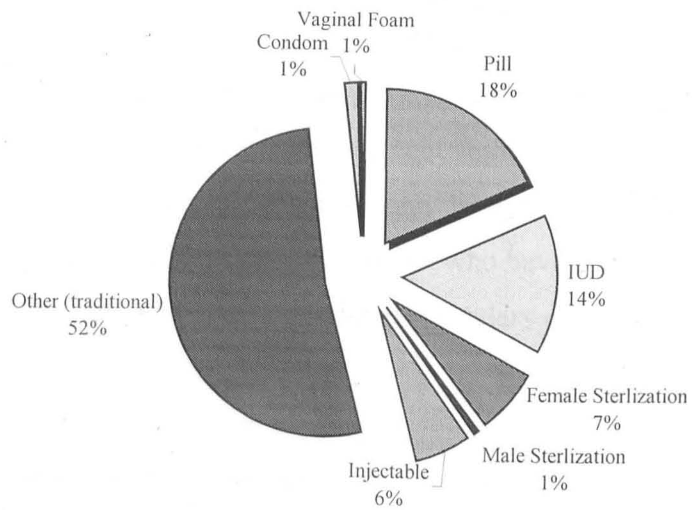
Ten percent of currently married women used a modern contraceptive method, up from 6 percent in 1991-92. According to the 2003 YFHS survey the current users of modern methods were only 13.4 percent, which is a remarkably small increase of only 3.6 percent over the intervening five-year period since 1997 (CSO and MI, 1993, CSO and MI, 1998, MOPH&P et al., 2004).

The modern methods most used by married women, based on the 2003 YFHS Survey, are the pill (6.3 percent), IUD (3.4 percent), Injectable (3 percent), female sterilization (1.7 percent), male sterilization (0.1 percent) and vaginal foam (0.1 percent). Overall the most widely used methods are the traditional methods, which constitute 43% of all methods in 2003 compared to 52% in 1997 (see Figures 3.3 and 3.4). In 2004, the public were offered two new methods of contraception, the injectable and the implant.

The most striking feature of the YDMCHS data is the tremendous difference between the fertility preference and fertility behaviour of Yemeni women. In 1991 one-third of currently married women cited that they do not want to have more children, in 1997 fifty percent of the married women wanted no more children, and the corresponding figure for 2003 was 39 percent. The total unmet need for family planning in Yemen based on the 1997 survey was 39 percent, 17 percent for spacing and 21 percent for limiting. In 2003 the unmet need for spacing was 23.3 percent and for limiting 27.6 percent. The total unmet need was 50.9 percent (CSO and MI, 1993, CSO and MI, 1998, MOPH&P et al., 2004).

The intention to use family planning among currently married women has more than doubled since 1991-92, from 16 to 36 percent. Interest in adopting family planning may be greater than the figure indicates. According to the 1997 YDMCHS survey, one in five Yemeni women cited fear of side effects or health concerns as the main reasons for not intending to use a method in the future. Lack of knowledge of a method or a source for a method that was the main reason in 1991-92 (13 percent) has dropped to 8 percent. Husband's disapproval has also declined sharply from 16 to 9 percent.

**Figure 3.3:**



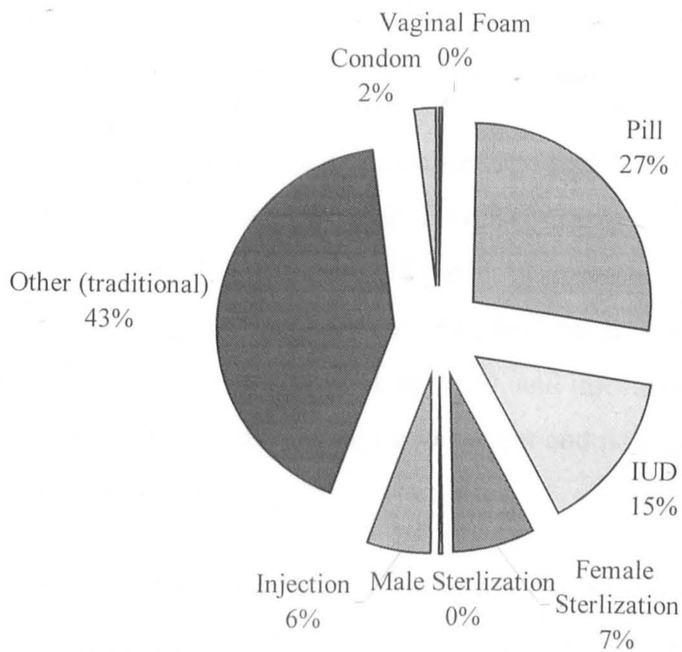




**Figure 3.4:**

**Method Mix for Contraceptives Methods (YFHS Yemen 2003)**

In 2003 the YFHS data revealed that the main reasons given for non-use are; want to have more children (one-fourth), disapproval of husbands (6 percent), religious prohibition (10 percent), and fear of side effects (15 percent) (CSO and MI, 1993, CSO and MI, 1998, MOPH&P et al., 2004).

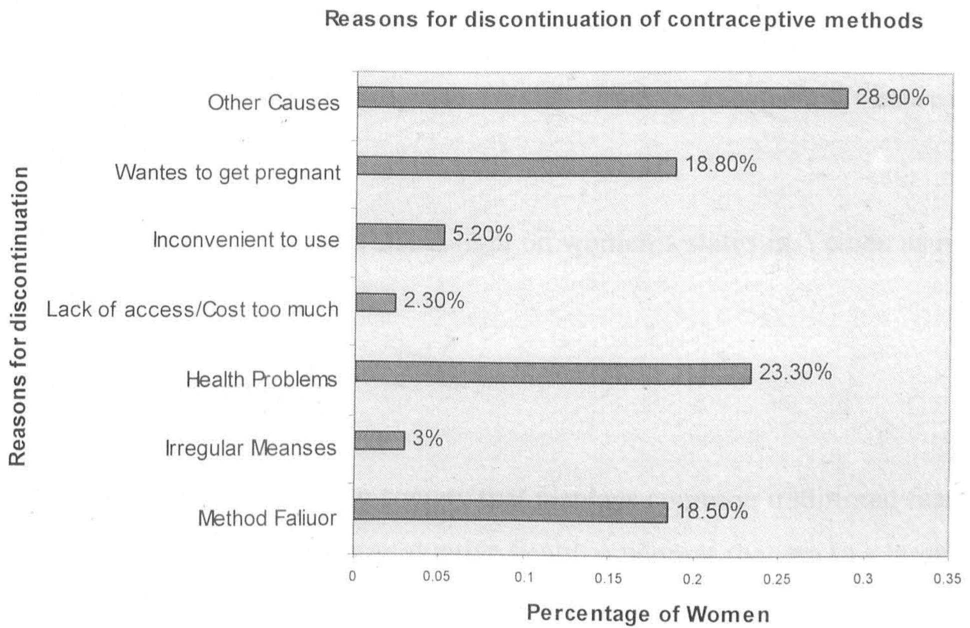
Contraceptive use (excluding breastfeeding) varies substantially by background characteristics of women. It varies from 7 percent among rural women to 28 percent among urban women. In terms of education, only 10 percent of illiterate women use any method compared with 26 percent of women who have completed primary schooling and 44 percent who have completed secondary or higher education (MOPH&P et al., 2004).

Problems experienced with using a family planning method may effect women's health, reduce the effectiveness of the method or lead to termination of use. An understanding of the problems users experience is, therefore, important to improving family planning delivery in Yemen. In order to obtain information about problems associated with use of specific contraceptive methods, during the 1997 YDMCHS, women who were using a modern method were asked if they had experienced any problems with their current method, and if so, what the problems were.

Around 40 percent of IUD and injectable users and one-third of pill users reported having a problem with their method. Health concerns were the most frequently cited problem regarding the IUD users (38 percent), injectables (38%), female sterilisation (33 percent) and the pill (31 percent). The high proportion of women who reported health concerns with using the pill, the IUD, and injectables underlines the need to provide information and counselling to current and potential users of these methods (CSO and MI, 1998).

Women who use contraceptive and those who are not current users were also asked about the reasons behind their termination of using contraceptive. As shown in Figure 3.5 almost 23 percent of the women cited health problems were the main reason, and methods failure were reported by 18 percent of the women (MOPH&P et al., 2004).

**Figure 3.5**




Source: YFHS, 2003

**Figure 3.6**

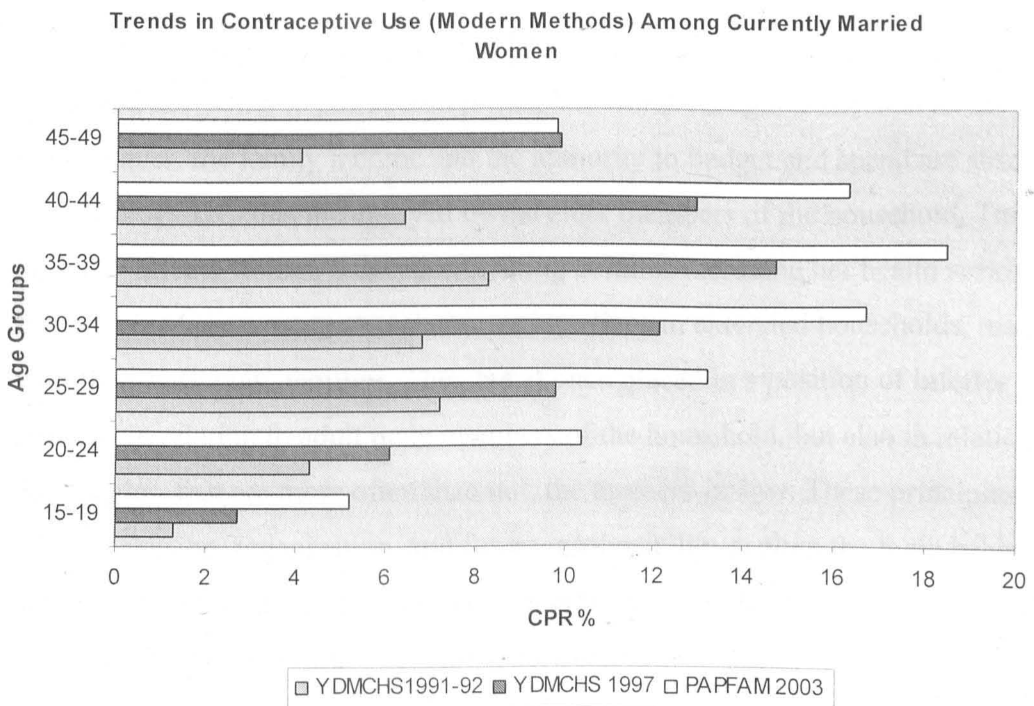



Figure 3.6 illustrates the trends in contraceptive prevalence for different age groups, based on the data from the 1991 YDMCHS, 1997 YDMCHS and the

2003 YFHS. Since 1991, contraceptive use among Yemeni women has doubled in the age groups of 15-19 and has increased more dramatically among women in the age groups of 30-34 and 35-39.

### 3.7.2 Women Status and Reproductive Health / Family Planning Concerns in Yemen.

The following section intends to shade light on women's status in Yemen as related to RH/FP.

**I) Women within the family**

Yemen is a typical Arab/Moslem society that displays common traditional features and projects demographic and reproductive health outcomes that are to a large extent attributed to socio-economic and cultural forces that historically have permeated the family and marriage system of Arabs. Actually, Yemen presents an exemplary in the Arab region where cultural traditions and tribal geopolitics are believed to operate excessively to regulate the status of women in the family and in the community (Farah et al., 2006)

Moreover, because the vast majority of Yemeni families and households are organized according to patriarchal principles, which recognize the man as the breadwinner, the family income and the authority to budget and spend are strictly male prerogatives that are enjoyed by the elder members of the household. This probably affects women's decision-making abilities including her health seeking behaviour. Many women start their marriage lives in extended households, mainly with their husbands' families. They are at once placed in a position of inferior power, not only in relation to adult male members of the household, but also in relation to the females, that are more often than not, the mothers-in-low. These principles of family cohesion, organization, and future responsibility explain the logic behind the patterns of consanguineous marriage, son preference, and repeated childbirth. They also indicate the importance of fertility to women.

**II) Women's autonomy and family planning choice, behaviour and practice.**

Hypothesis linking women's autonomy to contraceptive use has long been advanced in literature. For example, where group norms and practices limit women's mobility and their contact with non family members, women's exposure to novel ideas or technological innovations, including contraceptives, may be constrained (Cleland and Christopher, 1987). Opposition from husbands' can also be a barrier to contraceptive use in patriarchal settings. Acquiring contraceptives may be especially difficult in situations where limitations are placed on women's freedom of movement and access to economic resources (Morgan et al., 2002).

According to Morgan (2002), one aspects of women's autonomy- their freedom of movement- is likely to be crucial if women are to translate a desire to end childbearing into effective contraceptive use. Freedom of movement is a single feature of autonomy, namely the ability 'to obtain information and to use it as the basis for making decisions about one's private concerns and those of one's intimates'(Dyson and Mick, 1983:45).

In the Arab world, researchers and policymakers have began to explicitly acknowledge that the status of reproductive health and right is often closely linked to women's autonomy (Mass et al., 2004, Obermeyer, 1994). Farah and associates (2004) have alleged that the poor performance of the Arab countries in the area of reproductive health and reproductive rights is partly prefixed by their poor achievement of gender equity and women's autonomy and their empowerment(Farah et al., 2004).

In a rapid assessment survey conducted in 17 districts in Yemen, the researchers explored various features of the woman's autonomy in respect to selected reproductive knowledge and behaviour. Moreover, the study examines how women's autonomy could determine the direction and magnitude of major RH outcomes. The study has confirmed that Yemeni women are generally poor in their autonomy dimensions and poorer when these dimensions are appraised on the basis of the internationally accepted reproductive health and socio-economic rights (Mass et al., 2004).

Some of the major findings from this study can be summarized as follows:

A small proportion of those women (about 23%) took part regularly, in decision concerning household budgetary matters. The study also showed that 72 percent of them experienced lack of involvement in pertinent reproductive issues.

A sizeable proportion of husbands were shown to reinforce conservative measures against women's autonomy. For example, 1 in 10 were reported to reinforce strict restrictions on their wives' mobility to designated places where health and social amenities can be found.

About 96 percent were not affiliated to any one of the socio-political organizations in vicinity of women's households; while very few of them, 3.8 percent, were recorded as members in only one socio-political forum. The study revealed that about 30 percent of the husbands disapprove of wives' outside-home work.

Being located in an urban area raises significantly the women's decision-making autonomy in area of reproductive health and household budget items; however it reduces their mobility and decision-making authority.

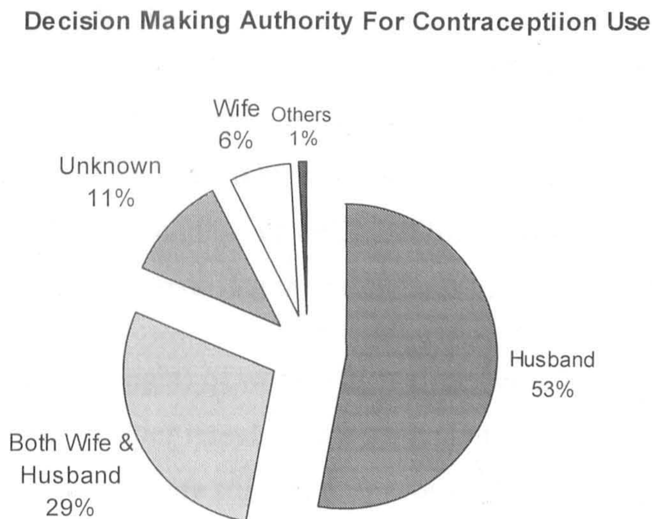
Women's education and not significantly their husbands' are shown to be a strong predictor of the level of their decision-making authorities regarding reproductive health rights, household budgets and physical mobility. Furthermore, women's engaged in paid work (and not in unpaid family work) enormously raises their authorities related to freedom of mobility and reproductive health decisions(Farah et al., 2006).

Regarding the decision-making authority in contraceptive use, the 2003 YFHS data reveals that the husband has the first say regarding the use of contraception. As seen in Figure 3.6, in more than 50 percent of the cases the husband takes the decision alone, while in only 6 percent of the cases the wife has the right to decide by herself whether or not to use contraceptive.

In order to gain insight regarding spousal communication and family planning, the currently married respondents in the YDMCHS were asked how often they had talked to their spouse about family planning in the past year. Approximately 42

percent of women said they had not talked to their husbands about family planning in the year preceding the survey, while 26 percent said they had discussed it once or twice, and 32 percent had discussed it more often. Women in the oldest and the youngest cohorts were least likely to have discussed family planning with their spouse.

**Figure 3.7**




In 40 percent of couples, both husband and wife approved of family planning, and in 22 percent both disapproved. In 12 percent of couples, the wife was found to approve but the husband did not, while in 4 percent of couples the husband approve but the wife did not. There are marked differentials by level of education: the higher the wife's level of education, the more likely it is that the couple approves of family planning. Partly for this reason, couples in urban areas are twice as likely to approve of family planning as those in rural areas (CSO and MI, 1998).

## 3.8 SUMMARY OF KEY FINDING OF COUNTRY PROFILE

Yemen is a high-fertility country with elevated levels of maternal mortality and an unmet need for family planning. Limited access to and poor quality of reproductive health services and gender related problems comprise the major explanation for these poor indicators.

Yemen's still-high rate of population growth, with the high social costs it entails, can only be corrected in a sustainable way by the education and empowerment of women. There is far to go in this respect, considering the low school enrolment ratios for girls, and the near-absence of women in parliament and local councils. Illiteracy, immobility, lack of control over fertility, limited opportunities for participation in decision making, and limited legal rights in practice all reduce the immediate quality of life of women, as well as their potential contribution to raising their standards of living

Laws protecting the rights of women in many spheres have been enacted, but serious legal inequalities remain, some aspects of economic and political participation of women are still not fully protected and enforcement is often lacking.

Yemen has been through a series of political and economic turbulences till late 1990s which have undermined the development of various aspects of public services. Health services are provided mainly by the public sector, which has been undermined by long–term under-funding and poor management of the health facilities, combined with an economic downturn.

The government of Yemen conceived family planning services as an integral part of the overall reproductive health care services. The public sector is a major provider of family planning in Yemen. The private sector and NGOs play a major role in providing modern methods of contraception to those who want to regulate their fertility. Yet despite these compelling reasons for family planning services, and despite the unmet need, the services that do exit are often under-utilized. One hypothesis to explain this conflict between need and practice is the poor quality of the services that are offered.

The International Conference on Population and Development (ICPD) held in 1994 in Cairo directed attention to the social and economic constraints of women's access to reproductive health services. A central recommendation of the ICPD's programme of action of the ICPD is for universal access to a full range of safe and reliable family planning methods, broadening contraceptive choice, improving quality of care, and ensuring reproductive rights. Yemen had endorsed ICPD's declaration, however; the current level of use of reproductive health services is far lower than expected given the government's supportive policies and a large unmet need for family planning. Hence a need emerges for a strategic assessment that identifies actions to address these concerns.

An assessment of the quality of the current services is essential to give better understanding on the available services and to identify weaknesses. While the views of those who have not used the services are important, women who have already gained access to the care are more likely to reflect the quality of the services based on their own experiences.

**In summary,** this chapter presents in detail the historical, geographical, demographic, and economic features for the country of the study. In addition, it describes the health cares system, and the government supported policy for family planning. It also sheds light on the health status of women, their fertility intentions and behavior, and their power and autonomy within their family to give an overall social and cultural context of the study population. The next chapter will describe the methods that were used during data collection.

# Chapter Four

# STUDY METHODOLOGY

## 4. INTRODUCTION

This chapter is divided into seven sections. The first section presents the study Area, and the second section describes the study design, includes instruments for data collection and target population. Details of data collection procedures are presented in section three, and section four presents the data analysis. Sample size and sampling methodology are covered in section five, and the last two sections describe the quality assurance procedures for the data and methods as well as the ethical issues and considerations.

## 4.1 STUDY AREA

The study was conducted in Sana'a city, in a predominantly urban area. The total population of Sana'a city is estimated at 1,488,000 people by the year 2000, comprising of 8.2 percent of the total population (MOP&D, 2002)

The city is characterized by a rapidly population growth rate estimated at 8.9% annually. Sana'a city is the main receiver of internal migrations, and this influx makes it the political and historical capital of the republic of Yemen.

About 44 percent of the city population is under 15 years of age and women of reproductive age constitute 19.5% of the total population. The total fertility rate is estimated at 4.0 births per woman. The social and health characteristics in the city are slightly better than those in the rest of the country, although these characteristics are still far from ideal. For example, more than 80 percent of households have access to safe water supply compared to less than fifty percent for the total population. Illiteracy is still one of the major barriers of progress and development for residents of Sana'a city. Women's illiteracy rate is 39% compared to 64% for the general population, with the gender gap in education remaining high in favour of males. For more comparative differences in human

development index, demographic and health indicators between Sana'a city and the total population (see Annexes 4.1, 4.2 and 4.3).

For this study, Sana'a city was chosen to represent an urban setting because of its high development infrastructure of health services which are likely to offer a choice of facilities, methods and different institutions (governmental, and non-governmental organizations). According to the 1998 Comprehensive Health Survey there are 21 governmental SDPs that provide family planning services in Sana'a city (4 hospitals and 17 health centres). At the same time there is one main NGO, which provides family planning services in Sana'a city, namely, the Yemen Family Care Association Clinic (an affiliate of the International Planned Parenthood Federation).

## 4.2 STUDY DESIGN

The study uses a combination of a quantitative and qualitative approach in order to obtain the most accurate and realistic picture of the quality of care and utilization of family planning services.

The complementary qualitative and quantitative approach applied the following data collection instruments:

- Exit interview with a structured questionnaire
- Direct observation of client/provider interaction
- In-depth interview with clients, and
- Collection and analysis of service statistic data

**SUMARY OF RESEARH METHOD USED**

| Type of the instrument | Sample of the target population | Source of the instrument used |
|---|---|---|
| Exit interview For family planning clients | Gov hospital = 200<br>Gov health centre = 100<br>NGO SDP= 100 | Adapted from situation analysis study (see annex 4.5) |
| Observation guide for interaction between family planning clients and service providers | Gov hospital = 200<br>Gov health centre = 100<br>NGO SDP= 100 | Adapted from situation analysis study (See annex.4.4.) |
| In-depth interview with family planning clients | Total interviewee= 37 | Developed for the study<br>See Annex 4.6) |
| Service statistic<br>Of family planning acceptors and re-visitors | All acceptors and re-visitors for the years before the survey | Recoded from services statistics of the Gov & NGO SDPs |

### 4.2.1 Methodology for the exit interview and direct observation

**Target population:**

- Service delivery points (clinics) providing family planning services within the governmental and non-governmental organization in Sana'a city.
- Clients attending the service delivery points seeking family planning services during the period of the study.

**Data collection instrument:**

- Observation guide for interaction between family planning clients and service providers.
- Exit interview questionnaire for family planning clients.

**Recruitment of target population for direct observation**

Clients were recruited from the service delivery points (governmental health centres, governmental hospitals and NGO clinic) in Sana'a city. Women of

reproductive age who visited the SDPs during the study period seeking family planning services were approached by the researchers and asked to participate in an interview. For observation of interaction contact between family planning clients and service providers a standard observation guide were used (see Annex 4.4).

Two observers conducted the observations of interaction between the service providers and the family planning clients during the study period after obtaining the consent of both the client and provider before proceeding to observe the interaction. This data collection instrument was designed to help in recording what happens when a provider counsels and examines a family planning client. The observation of the client-provider interactions provided most of the information regarding how a client is counselled, examined, and provided with a method of contraceptive.

The observation guide was designed so that the observer circles numbers which describes what she has seen. There were no fixed order for each consultation and it was essential that the observer learnt the structure of the observation guide so that whenever a particular action was seen or a heard specific issue being discussed, the observer knew exactly where to mark the guide. In some cases it was necessary to remember what happened and to mark the guide after the consultation was finished.

The observations were the most difficult task to complete as it required good listening and observing skills. However, the observer by this time had become very familiar with the observation guide, had memorized parts of it, and knew what to look for when the client-provider interaction took place and knew where to record the information, especially since the interaction was, for most of the time, of very short duration. This enabled the observer to record all what had happened in the interaction and this was helpful later on with the analysis of the interactions.

The observers were female midwives, with several years of family planning experience who also trained others in family planning. Their training

experience ensured that they are able to view an interaction critically, and they were familiar with the entire provider behaviours as listed in the observation instrument.
Before the first consultation, the observers obtained the provider's permission to sit in and observe the client-provider interaction, and the provider was assured that her competence was not being evaluated. Before the consultation began, the provider asked the client whether it was acceptable for the observer to be present. The observer sat in the background so that she was not directly in eye contact with either the provider or the client, but would be close enough to be able to see and hear exactly what went on.

At the end of the consultation, the observer followed the client upon leaving the provider and asked if she would agree to be interviewed. If she agreed, then the observer introduced the client to the social science interviewer and gave the observation guide/exit interview instrument to the interviewer.

**Recruitment of target population for exit interview**

This instrument gathered information from the family planning clients about the services they had just received. This information was used in assessing the quality of care that the clients received from the SDPs, specifically, whether information is communicated effectively, how clients feel about the services, and how much clients understand the process of selecting a family planning method.

Collecting information through interviews was not always easy and required an ability to ask questions clearly and in listening carefully to the answers. The interviewers were social researchers who were chosen from those who participated in the first and second National Demographic and Maternal and Child Health survey conducted by the Central Statistical Organization in Yemen (CSO). The CSO is a well-established institution which has been undertaking multidisciplinary research in Yemen for the last 20 years. Their staff are experienced in using different research methods in various areas

including public health. The researchers received training on administering the specific questions for the study.

After obtaining informed consent, the social worker administered the questionnaires to all the family planning clients observed. The interviews were conducted on the SDP premises, in a separate room to ensure privacy and unrestricted participation. In case of no separate room being available the interviews were conducted in a corner of the room, where others could see that a conversation was taking place, but they could not hear the conversation.

All completed interview schedules were checked for errors, omissions, and discrepancies as soon as possible after interviewing ceased. After the interviewer had checked and corrected the questionnaire, it was again rechecked by the field supervisor.

In the exit interview all clients were asked several questions together, and then filter questions divided them into new and revisit clients, who receive specific questions. The clients were then divided further into various method users, and were asked another set of specific questions (see Annex 4.5 for the exit interview instrument used for the study).

### 4.2.2 Methodology for the in-depth interview

**Target population:**

- Family planning clients attending the service delivery points seeking family planning services during the period of the study.

**Data collection instrument:**

Clients were questioned about their perceptions of the quality of care provided and received. The aim of in-depth interviewing was to elicit the interviewee's perspective, rather than those imposed on by the researcher. The respondents were given considerable liberty with their responses and in discussing areas which were not raised by the researcher.

Although focus group discussion is particularly useful to explore people's perception, knowledge and experiences and is less time consuming comparing to the in-depth interview, the in-depth interview was selected in order to encourage people to air sensitive issues, in an extremely closed culture where the subject of family planning is taboo, as the case with our study population.

The interview took the form of a "guided conversation" where the interviewer had an "interview guide" list (see Annex 4.4 for in-depth interview topic guide).

**Recruitment of target population**

In order to identify the group of family planning clients the principal investigator visited each heath facility and spent time recruiting the clients. During this period, the researcher took the women who had come for maternal health and family planning services for screening to ascertain whether they were to be included in the study.

Women attended the clinic and, at the same time, the providers and staff identified friends and relatives who were living in the catchments area. This identification technique which was applied to identify clients is known as the snowball technique.

Clients were invited to take part in the study voluntarily. They were assured that withdrawal were possible at any time. Permission to tape record the interviews and to use the given information for the research was taken. Confidentiality was assured and the safe storage of the data was guaranteed.

### 4.2.3 Methodology for the service statistic

To measure the utilization of services as per type of service delivery points in both sectors (governmental and non-governmental organization), service statistical data were collected for the past 12 months before the survey commenced. Data were collected for information on the number of new family

planning acceptors in the previous year, the number of visits to SDPs, and the type of contraceptive methods which were distributed to the clients.

## 4.3 DATA COLLECTION PROCEDUCRES

### 4.3.1 Permission from local authorities

Permission to visit SDPs was obtained from the local authorities, and this was organised by the principal investigator. At the SDPs themselves, the research members were introduced to the SDP staff and the purpose of the study was briefly explained. Letters explaining the research aim and objective were sent to the health authorities. Their permission was sought to interview and observe some activities and to have access to necessary documents. Permission was also obtained from the service delivery points (SDPs) managers.

### 4.3.2 Training of the research team

Training was held for the research team which lasted for one week. The training consisted of a broad introduction to the research objectives, interviewing and observing techniques, ethical issues, and a detailed review of each question in every questionnaire so that all team members fully understood the meaning of each question, how to ask the question, and how to record the answer. The training included role-playing in order to give each team member the opportunity to practice asking the questions and in recording the responses. Discussion of these instances provided an opportunity to clarify definitions and understandings (for training schedule see Annex 4.7).

### 4.3.3 Pilot study

A pilot study which was conducted in an SDP, for pre-testing the instruments and logistics of the fieldwork was not included in the main study. Piloting provided a useful learning stage for the field process and in modifying the instrument.

The questionnaire was pre-tested in an actual field situation. The pre-test involved 45 respondents who were purposively sampled in such a way as to ensure that the expected heterogeneity of the study sample was reflected in the pre-test sample.

The main purpose of the pre-test was to ensure that the respondents were able to understand the questions so they could answer them usefully. After interviewing the pre-test respondents, each interview was followed by a debriefing in which the interviewer asked about the respondent's understanding of the questions that were thought to be misunderstood or that appeared to have caused difficulty for the respondents during the interview. The pre-test was completed before the training of the interviewers.

Based on the outcomes of the pilot study, some questions were excluded and others were added in the exit interview and observation guide. The following changes were deemed to be necessary, for example:

- The question: *Overall, would you say you were satisfied with your visit to the facility today, or were you dissatisfied with your visit today?* This question invariably produced positive answers and accordingly the question was excluded.
- The question: *In your opinion, did you have enough privacy during your consultation with the service provider?* Again this question produced consistently positive responses, so it was changed to: *Were there any persons attended your examination session, in addition to the provider?, (if yes) did this situation bother you?*
- To confirm the integration of STD within the family planning services, based on the observation during the pilot study, the following question was added: *Did the provider recommend to the client a medicine to be given to her husband for treatment of STDs?*
- Indicators were developed for the revised and for the added questions (see Annex 4.10 for the indicators which were developed for this study).

## 4.4 DATA ANALYSIS

### 4.4.1 Analysis of qualitative data

The process of analysis was conducted in two-stages. In the first stage the raw data were coded and classified by reviewing the transcribed discussion for

potential conceptual categories, using the guideline questions as initial categories. These coded data was regrouped or indexed along the lines of the nature of responses provided and the intensity with which they were expressed to facilitate further analysis.

In the second stage the original data were analyzed in conjunction with the transformed conceptual data. Constant comparisons were carried out with the data in order to detect divergent views among the participants.

### 4.4.2 Analysis of quantitative data

The data were validated and entered using the SPSS statistical package. The analysis included summary statistics, frequency distribution, cross-tabulation, and measures of associations based on the chi-square test of independence. Multivariate analysis using logistic regression was applied to the data on the client's personal characteristics.

The information under quality of care was arranged according to the Bruce/Jain framework, as described in Chapter 1: interpersonal relations, choice of methods, information exchange, and technical competence, mechanisms to encourage continuity, and the appropriateness and acceptability of services.

The information under each of these headings is presented as a list of indicators. Each indicator specifies a distribution, as a percentage or mean of some results, which can be used as indicators of the quality of services (see Annex 4.8 and 4.9 for operation definition of quality elements and selected indicators).

## 4.5 SAMPLE SIZE AND SAMPLING METODOLOGY

The sample size of clients for the direct observation and exit interview were calculated using statistical calculations. In order to detect a 15% difference in client satisfaction levels between governmental service delivery points (hospitals and health centres) and NGO at 95% confidence and with 80 percent power, a sample size of 112 observations per group was calculated using the EpiInfo statistical programme.

The number of clients selected for each service delivery point was proportional to the utilization of these services (based on the 1999 utilization data from service statistics.). All clients attending the service delivery point during the study period were included in the study. A census of service delivery points was included. Data were collected daily over six days per week (Saturday-thursday) during working hours.

## 4.6 QUALITY ASSURANCE OF THE DATA AND METHOD

The quality mechanisms put in place in this study assured the trustworthiness of the outcomes. At each stage throughout the research, efforts were made so that the research would produce trustworthy and credible results.

Topic guides were pre-tested to ensure the suggested issues were appropriate for the interview, which assured the validity of the results. Training of the interviewer assured competency and the collection of credible results. The use of a local interviewer and local language put the respondents at ease and assured free flowing discussion.

All in-depth interviews were recorded with the consent of the respondents, and no information was lost during note taking. At the same time the data from the recorded interviews were transcribed and replayed afterwards for correction of any transcription errors.

The analysis was carried out without bias, and the interpretation and results were drawn from transcripts and observations only, with no pre-conceived ideas from the researcher on the research theme.

Triangulation of the results of different methods and the quantitative study, confirmed trends and linkages in the results, and this is seen as an important mechanism which increases the trustworthiness and dependability of the study.

With regards to the structured questionnaire (for the exit interview) and the observation guide for interaction between clients and service providers, the

situation analysis instrument was adapted and had already been previously tested and validated (used in more than 30 different developing countries).

Data was entered into the SPSS programme as soon as possible after the questionnaires had been received and double entry was applied in order to minimise errors.

The questionnaire was translated into the Arabic language by local expert Arabic/English translators and were then re-translated into English to assess for any inconsistencies. Persons who were not familiar with the original wording of the questionnaire conducted the back translation.

Qualitative and quantitative data were analyzed separately but complemented each other. Validity was added to the results by using different methods (triangulation) for assessing the same problems. Given the size of the study, recurrent themes were identified manually. Data were analyzed on a daily basis in order to adapt the topic guide.

The interviews were conducted on the SDPs premises in a separate room to ensure privacy and unrestricted participation. Where there were no separate room available the interviews were conducted in a corner of the room where others could see that a conversation was going on but could not hear the conversation. Clients were invited to participate on a voluntary basis, and they were assured they could withdraw from the interview at any time.

From the situation analysis studies adapted in this study a key source of data were from the observations of the provider-client interactions. An important concern with this data was with regards to reliability. While observers were given extensive training, there were some obvious degrees of variability between them. As part of the situation analysis in Turkey, two observers recorded the same provider-client interaction. A comparison of the responses from the two observers revealed that overall, there was a very high degree of reliability (Huntington et al., 1996).

All these mechanisms assured a high degree of quality, thus increasing the validity and trustworthiness attached to the results. There were, of course, potential problems which could limit the trustworthiness of the study result; however, the quality assurance mechanisms described above aimed to minimise these problems as much as possible.

## 4.7 ETHICAL ISSUES AND CONSIDERATIONS

The study design included interviews of clients, as well as observations of provider-client interactions. These study procedures potentially carry some risks for the study subjects unless mechanisms are established to protect the subjects and the relevant local laws and regulations that govern the review of research proposals and procedures were considered.

An ethical approval form was submitted to the Ethical Committee at the Liverpool School of Tropical Medicine. This committee reviewed the research proposals to ensure that issues of confidentiality, privacy, informal consent, and other general concerns would be addressed in a way that is ethical and protects the study subject from any harm or discrimination. The researcher obtained approval and clearance from this committee before conducting the study. At the national level, the Yemeni Research Council was activated following the start of the study and accordingly informal approval was obtained from the Ministry of Public Health.

Informed consent and other general concerns were conducted in a way that is ethical and protects the study subject from any harm or discrimination. The full importance of privacy, informed consent, and protection of the subjects were communicated to all those who were involved with the study and the researchers were practiced on how they communicate these messages to the study subject and to others concerned with the study.

The study was designed so that the subjects of the study are also seen as the beneficiaries of the study. The benefits to be derived by both clients and providers from the research are mainly social, and the information will be used for developing improved programme policies and practices. After a full analysis, the interpretation of the results and recommendations will be

offered to the Ministry of Health as suggestions for implementing changes.

Information obtained from clients as part of the study were kept confidential and private as part of the "do no harm" guideline. The identity of the study subjects were protected by the researchers by identifying subjects by code rather than their name and address. Also, the principal investigator was careful to control and remove any variables that could have been used to identify any individual interviewees.

In-depth-interview participants received assurances from the research team that the researcher would store all transcripts and tapes securely, the materials would not be circulated, and any written results would exclude details of the individuals which could identify them.

As a guarantee of confidentiality and security when recording interviews, the processes of transcribing the tape recordings were carried out in private. The recordings and transcriptions were stored in a locked cupboard to which only the principal investigators had access to, and on completion of the analysis the materials were destroyed.

In addition, physical examinations were sometimes uncomfortable and embarrassing for the clients. The study observer therefore always ensured obtaining the consent of the client before being present during the examination, and the client's desire for privacy in these settings was always respected.

Confidentiality extended not only to the client's identity but also to the exposure the client experienced during the course of the study. Both the observation and the exit interview dealt with issues of a highly sensitive nature of family life and sexual behaviour, which might have made the client feel ill at ease, particularly if others could hear the client's responses to the questions. The interviews were, therefore, conducted in a private setting where the client felt at ease (and this also increased the validity of the information collected).

An area as free as possible from any disturbance was chosen for the in-depth interviews. It was emphasized that the clients were not forced to participate in the

study if they did not want to, and they were also informed that they could drop out of the interview at any stage.

The full importance of privacy, informed consent, and protection of subjects was communicated to all those involved with the study, and the research team were practiced on how they communicated these messages to the study subject and to others.

It was possible that there could have been some additional risks to a client from a provider who was nervous about being observed. However, it was believed that the more likely occurrence was that the provider would be especially careful during the observation and would be seen to attempt to provide services of as high a quality as she is capable of providing.

The field researchers were given information about how to handle and direct questions from the study subjects about family planning and other health related matters. Clear guidelines were provided to the field researchers in order to emphasize the purely voluntary nature of all during participation. It was made clear to all the participants that he/she were free to decline or withdraw from the participation at any time without suffering any disadvantage or prejudice.

Clients were informed that they could receive all the services from the health facility whether they participated in the study or not and the subject could freely and voluntarily agree to his/her inclusion in the study. Given the fact that the illiteracy rate is high among the study population, the consent was given orally rather than in a written document. The clients were also given the opportunity to ask any questions about the study before giving their consent.

The observer obtained the consent of both the client and the provider to be present during examination. The client's desire for privacy in these settings was respected at all times.

# Chapter Five

# RESULTS

## QUALITY OF FAMILY PLANNING SERVICES

### 5. INTRODUCTION

This chapter examines and compares the level of quality of family planning services provided by service delivery points in Sana'a city in respect to six elements of quality: interpersonal relations, choice of contraceptive methods, information given to clients, technical competence of providers, mechanism to encourage continuity and appropriate constellation of service. It also examines the level of the utilization of services in relation to type of service delivery points (Governmental and NGO facilities).

The results of data analysis in this chapter are based on the methods stated in the previous chapter, and it is divided into five sections. Section 5.1 provides a description of the study population, covering the social and demographic characteristics of respondent. Section 5.2 presents the results for the quality assessment in respect to six elements of quality which were obtained by the two methods used: the exit interview questionnaire and direct observation of client-provider interaction through a survey conducted in SDPs providing family planning services in Sana'a city, including governmental and NGO SDP. Section 5.3 presents the results obtained from assessing the perceptions of clients of the quality of care of family planning services, through qualitative interviews supported by secondary data and analysis of service statistic data.

Section 5.4 examines the utilization of the SDPs for clients attending both governmental and NGO service delivery points using service statistic data. Section 5.5 presents the important quality issues for family planning clients and the response of the family planning service providers to clients need for quality services. The key factors influencing quality and satisfaction were identified by multivariate analysis and are presented in section 5.6.

## 5.1 CHARACTERISTICS OF THE RESPONDENTS

### 5.1.1 Characteristics of the respondents in the in-depth interviews

Family planning clients (females) attended governmental and non-governmental service delivery points (SDPs) and residence within the catchments' areas of the SDPs representing the sample for the in-depth interview. Within the recruited sample a broad spectrum of personnel and demographic characteristics was found (see Table 5.1).

Thirty-seven clients who fulfilled the criteria completed the study. Three clients expressed an interest but dropped out, and four who were approached did not make any contact. The age of the 37 clients who fulfilled the criteria and were interviewed ranged between15-40 years. Eight clients had less than 3 children, 14 clients had up to 5 children, and three clients were childless.

**Table 5.1 Characteristics of the 37 clients who participated in the in-depth interview**

| Characteristics | Number of women |
|---|---|
| **Age (years)** | |
| 15-24 | 10 |
| 25-29 | 13 |
| 30+ | 14 |
| **No of living children** | |
| 0 | 3 |
| 1-2 | 8 |
| 3-4 | 12 |
| 5+ | 14 |
| **Education level of clients** | |
| Illiterate | 18 |
| < Secondary | 13 |
| Secondary+ | 6 |

The respondent's socio-economic status was classified according to their education status (18 had no formal education; 13 had less than secondary education; and six women had above secondary education).

### 5.1.2 Characteristics of the respondents in the exit interview

The profile of the study population for the exit interviews reflects the type of population served by the service delivery points (SDPs) in this analysis. Client characteristics varied somewhat between the two sectors: Governmental (Gov) and Non-governmental Organization (NGO) and within the governmental according to type of service delivery points [(Hospital (Hosp.) or Health Centre (H.C.)].

#### i) Clients' Age

Table 5.2 shows that over 40 % of clients were aged 25-34 (48.0% for NGO and 44.8% for governmental clients), 15% of clients of both sectors were aged between 35-45 years. In the age group of 15-24 years there were more clients in the governmental sector compared to the NGO sector. The proportions were 40.7% and 36.7% respectively.

**Table 5.2 Clients' age distribution by service delivery points group**

| AGE GROUP (YEARS OF AGE) | (GOV HOSP.) (N= 200) | (GOV H.C.) (N= 97) | TOTAL GOV (N= 297) | (NGO H.C.) (N= 98) |
|---|---|---|---|---|
| 15-24 | 41.5% | 39.2% | 40.7% | 36.7% |
| 25-34 | 45.0% | 44.3% | 44.8% | 48.0% |
| 35-45 | 13.5% | 16.5% | 14.5% | 15.3% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% |

Within the governmental SDPs the hospitals and health centres have almost the same proportion of clients in the age groups between 15-24 and 25-34, with a higher proportion of clients in the age group (35-45) who attended the health centres.

Overall there were no significant differences in the proportion of clients in the three age groups between the two sectors (Gov and NGO) as well as within the governmental service delivery points (hospital and health centre).

### ii) Number of living children (Parity)

There was a small difference between the proportion of clients who have had up to 5 children between the two sectors, 43.0% versus 40% for governmental and NGO respectively, and between the governmental SDPs the proportions were 44.0% and 40.8% for hospital and health centre respectively. Governmental clients tended to be of low parity, almost 31% had less than 3 children compared to their NGO counterparts, only 23% had less than 3 children. At the same token a higher percentage of NGO clients, almost 37.0% had six children which was more than the corresponding figures for the governmental clients, of 25.8 percent.

**Table 5.3 Clients' parity by service delivery points group**

| PARITY | (GOV HOSP (N= 200) | (GOV H.C. (N= 98) | TOTAL GOV (N= 298) | (NGO H.C.) (N= 100) |
|---|---|---|---|---|
| 0 – 2 | 32.0% | 29.6% | 31.2% | 23.0% |
| 3 – 5 | 44.0% | 40.8% | 43.0% | 40.0% |
| 6+ | 24.0% | 29.6% | 25.8% | 37.0% |
| Total | 100.0 % | 100.0% | 100.0% | 100.0% |

Within the governmental service delivery points, a higher proportion of the health centres clients had six children or more (29.6%) compared to their hospital counterparts (24%). A slightly higher percentage of hospital clients (32.0%) had less than 3 children compared to 29.6% of their health centre counterparts.

Overall there were no significant differences in the proportion of living children between the governmental clients compared to their NGO counterparts, as well as within the governmental SDPs.

The mean number of living children reported was 4.1 (SD 2.0), for the Gov clients the corresponding figures for the NGO clients were 4.7(SD 2.4), the difference was significant p=. 021. Within governmental providers the mean

number of children for the hospital client's was 3.9 (SD 2.2), while the corresponding figure for the health centre client was 4.3 (SD 2.6).

**iii) Clients' education level**

There was a wide diversity in the education level between government and NGO clients. Most of the NGO clients (54 percent) had no formal education, whereas only 15%had secondary education and more, government clients were more advantaged in this respect, only 28.6% of clients had no formal education while 23.6 achieved secondary education and above, the possible explanation of these diversity could be that many of clients approaching government SDP especially hospitals are residence of medical schools as these hospital are also teaching hospitals (Table 5.4).

**Table 5.4 Clients' level of education by service delivery points group**

| EDUCATION LEVEL | (GOV HOSP.) (N= 199) | (GOV H.C) (N= 98) | P VAL | TOTAL GOV (N= 297) | NGO H.C) (N= 100) | P VAL |
|---|---|---|---|---|---|---|
| Illiterate | 30.2% | 25.5% | | 28.6% | 54.0% | |
| < Secondary | 44.2% | 55.1% | ns | 47.8% | 31.0% | .000 |
| Secondary+ | 25.6% | 19.4% | | 23.6% | 15.0% | |
| Total | 100.0% | 100.0% | | 100.0% | 100.0% | |

*ns = not significant.*

Within the governmental providers a higher percentage of health centre clients were found to have had less than secondary education compared to their hospital counterparts. The percentages were 55 and 44 percent respectively. At the same time, a higher proportion (25.6%) of hospital clients had completed secondary school education and above compared to 19% of the health centre clients. The difference in educational level of clients within the governmental SDPS were not significant, however, there were a significant difference in the level of education between NGO and governmental clients.

**iv) Purpose of the visit**

Table 5.5 shows that the majority (71 %) of the one hundred NGO clients participated in the exit interviews were family planning re-visitors (45% who attended for routine check-ups and 26% were seeking consultations for problems they encountered with their methods), while 29% were new acceptors. The high percentage of repeated visits to the NGO might imply a high quality of services.

Among the 298 governmental clients, more than half (55%) were new acceptors while 45% were repeated visitors (11.0 % were complaining of certain problems versus 37% attended for routine check-up).

**Table 5.5 Distribution of clients' by purpose of visit by service delivery points groups**

| PURPOSE OF VISIT | (GOV HOSP.) (N= 200) | (GOV H.C.) (N= 98) | P VAL. | TOTAL GOV (N= 298) | (NGO H.C) (N= 100) | P VAL. |
|---|---|---|---|---|---|---|
| New family planning acceptor | 55.5% | 54.1% | | 55.0% | 29.0% | |
| Repeated visit (without problems) | 32.0% | 36.7% | ns | 33.6% | 45.0% | .000 |
| Repeated visit (with problem) | 12.5% | 9.2% | | 11.4% | 26.0% | |
| Total | 100.0% | 100.0% | | 100.0% | 100.0% | |

ns = not significant

There were no significant differences between the purposes of visit for clients approaching the governmental service delivery points. However, there were a significant difference between the governmental SDP and the NGO with regards to the purpose of the visit.

## 5.2 ELEMENT OF QUALITY OF CARE OF FAMILY PLANNING SERVICES

### 5.2.1 Interpersonal relation

Bruce defined "interpersonal relations" element of quality of care as the affective content of the client/provider transaction. The author suggests that it is this dimension, apart from the accuracy of the information given and the degree to which it is comprehended (important as it is) that may strongly influence clients' confidence in their own choices and ability, satisfaction with the services, and the probability of return visit (Bruce, 1990).

**i) Satisfying clients need for visual privacy**

The concern about privacy, as expressed by the clients during the in-depth interviews, also reflected in the result of the exit interview. To illustrate the issue of privacy, in this study clients were asked whether anyone was present during examination (visual privacy) or during counselling (auditory privacy) who did not participate in providing care and how did they felt about it.

For those whose medical examination was attended by others a significantly higher percentage of governmental clients expressed a concern with this situation compared to their NGO counterparts, 80% versus 55% for the two sectors respectively. Within the governmental SDPs, a higher percentage of health centre clients did not having any other person present, other than the provider who was attending for their medical examination sessions, compared to their hospital counterparts, but the difference was not significant.

**Table 5.6 Clients' response to visual privacy by type of service delivery points group**

| RESPONSE TO VISUAL PRIVACY | (GOV HOSP.) (N= 133) | (GOV H. C) (N= 68) | P VAL | TOTAL GOV (N= 201) | (NGO H.C) (N= 87) | P VAL |
|---|---|---|---|---|---|---|
| Clients who were concerned due to attendance of other who did not participate in providing care during their medical examination (visual privacy) | 77.4% | 85.3% | .ns | 80.1% | 55.2% | .000 |

*ns = not significant*

### ii) Satisfying clients need for auditory privacy

With regards to responses towards auditory privacy, it emerged from the exit interviews that clients were less concerned about auditory privacy, which was also included visual privacy. The data in Table 5.8 shows that only 22 percent of NGO clients would be concerned if other persons other than the provider listened to their conversation. With the providers during the consultation sessions the corresponding figures for the governmental clients was 33% and the differences were significant.

**Table 5.7 Clients' response to auditory privacy by type of service delivery points group**

| RESPONSE TO AUDITORY PRIVACY | (GOV HOSP.) (N= 182) | (GOV H.C.) (N= 92) | P VAL | TOTAL GOV (N= 274) | (NGO H.C.) (N= 91) | P VAL. |
|---|---|---|---|---|---|---|
| Clients who expressed concern due to attendance of others who did not participate in providing care during the consultation session. (Auditory privacy) | 25.8 % | 47.8% | .000 | 33.2% | 22. % | .049 |

Within the governmental SDPs a significantly higher percentage of clients in the health centres as compared to their counterparts in the hospitals would be concerned if other persons (mainly students who came from training institutes or medical schools) in addition to the providers listened to their consultation sessions, 48% and 26% respectively.

However, the presence of other persons rather than the provider during the client's consultation seemed to be a common phenomenon. Over 90 percent of clients in the NGO and Gov sectors indicated that there was another person present during their consultation in addition to the provider. No significant different noticed either between the two sectors (Gov and NGO) or within the two types of governmental SDPS in this regard.

**iii) Satisfying clients need for visual privacy by selected socio-economic and demographic characteristics**

Analysis of the data revealed that the degree of satisfaction of clients on the level of visual privacy provided was related to some of their socio-economic and demographic characteristics.

***a) Clients age***

There was no significant association found between the age groups and clients who were concerned by the attendance of other persons during examination, for the hospital clients as well as for the health centre clients and the NGO clients.

***b) Clients parity***

As far as the number of living children (parity) there was no significant association between the number of living children and those who were concerned by the attendance of other persons during examination, observed either within the governmental hospital, governmental health centre or NGO clients.

***c) Clients level of education***

Education appears to have an influence on the clients perception about visual privacy. The data in Table 5.12 gives the impression that as the level of education increases the more the client would be concerned by attendance of others during examination. This applies for the Gov hospital clients but did not materialize for the Gov health centre or NGO counterparts.

Statistical tests shows that there were a highly significant association between the level of education and concern by attendance of others during examination in the hospital setting, but for the health centre clients and NGO clients there were no significant association between the level of education and being concerned by attendance of others during examination.

**Table 5.8 Clients concerned due to attendance of other who did not participate in providing care their medical examination (visual privacy) by level of education and type of SDPs**

| EDUCATION LEVEL | (GOV HOSP.)*** % | (N) | (GOV H.C % | (N) | NGO H.C) % | (N) |
|---|---|---|---|---|---|---|
| Illiterate | 60.5 | (43) | 80.0 | (15) | 52.1 | (48) |
| < Secondary | 75.5 | (53) | 89.5 | (38) | 59.3 | (27) |
| Secondary+ | 100.0 | (36) | 80.0 | (15) | 53.8 | (13) |
| Total | 77.3 | (132) | 85.3 | (68) | 54.5 | (88) |

*** = P <. 001

**iv) Satisfying clients need for auditory privacy by selected socio-economic and demographic characteristics**

***a) Clients Age***

Clients in the younger age group appear to be very sensitive to the presence of other persons in addition to the providers during their consultation session and this was a common trend among clients in the different sectors or even within the same sector whatever the type of facilities.

Difference in the proportion of clients of different age groups who were concerned by others attending their consultation was significant for governmental hospital clients, the same applies for health centre clients. However, among the NGO clients the difference with this regard was not significant.

**Table 5.9 Clients concerned due to the attendance of others who did not participate in providing care their consultation (auditory privacy) by age groups and type of SDPs**

| AGE GROUP (YEARS) | (GOV HOSP.)*** % | (N) | (GOV H.C.)** % | (N) | (NGO H.C) % | (N) |
|---|---|---|---|---|---|---|
| 15-24 | 38.4 | (73) | 72.2 | (36) | 32.4 | (34) |
| 25-34 | 18.8 | (85) | 35.9 | (39) | 14.6 | (41) |
| 35-45 | 12.5 | (24) | 25.0 | (16) | 20.0 | (15) |
| Total | 25.8 | (182) | 48.4 | (91) | 22.2 | (90) |

**** P= <. 01. *** P= <. 001**

*b) Clients parity*

The highest proportion of clients who said they would be concerned if other persons in addition to the provider heard their conversation with the providers was among those who had less than three children. This attitude was a common response among all clients who approached the different SDPs, whether it was a governmental or an NGO facility (see Table 5.14).

**Table 5.10 Clients concerned due to the attendance of others who did not participate in providing care during their consultation (auditory privacy) by clients parity and type of SDPs**

| CLIENTS PARITY | (GOV HOSP.)*** | | (GOV H.C)** | | (NGO H.C) | |
|---|---|---|---|---|---|---|
| | % | (N) | % | (N) | % | (N) |
| 0 – 2 | 52.6 | (57) | 67.9 | (28) | 38.1 | (21) |
| 3 – 5 | 18.8 | (80) | 44.4 | (36) | 20.0 | (35) |
| 6+ | 4.4 | (45) | 32.1 | (28) | 14.3 | (35) |
| Total | 25.8 | (182) | 47.8 | (92) | 22.0 | (91) |

** P= <. 005. *** P= <. 001

Based on statistical tests the association between client's parity and being concerned by other persons attending the consultation sessions were highly significant for the hospital clients and health centres clients, but were not significant for NGO clients.

*c) Clients level of education*

The level of education, which appears to have an effect on clients perceptions concerning auditory privacy, was secondary education and beyond, and this applied to hospital and health centre clients within the governmental sector as well as for the NGP sector (Table 5.11).

However, the association were significant in the case of hospital clients, but were not significant for clients approaching the governmental health centre or the NGO.

**Table 5.11 Clients concerned by attendance of anyone who did not participate in providing care their consultation session (auditory privacy) by clients level of education and type of SDPs**

| EDUCATION LEVEL | (GOV HOSP.)*** | | (GOV H.C.) | | NGO H.C | |
|---|---|---|---|---|---|---|
| | % | (N) | % | (N) | % | (N) |
| Illiterate | 10.3 | (58) | 33.3 | (21) | 18.4 | (49) |
| < Secondary | 10.7 | (75) | 50.0 | (52) | 18.5 | (27) |
| Secondary+ | 68.8 | (48) | 57.9 | (19) | 40.0 | (15) |
| Total | 26.0 | (181) | 47.8 | (92) | 22.0 | (91) |

*** P= <. 001

In summary, concerning the auditory privacy of young clients, low parity clients and those with advanced level of education were found to be more concerned about visual privacy compared to the elder clients or those who were less educated or even not attending any level of education. However, with respect to visual privacy, the differences were minimal across the socio-demographic characteristics of the clients, with the exception of highly educated clients. This was not surprising given the cultural norms of the society from which this sample was obtained, in other words, where female modesty is highly valued.

**v) Satisfying clients need to ask questions**

Providers were supposed to invite clients to ask questions, or if they had questions. Clients who had any concerns or problems should be free to ask questions and, in return, the provider should respond to their clients needs.

This study shows evidence that a significantly higher proportion of clients approaching the NGO did want to ask questions compared to their governmental counterparts (72% versus 52%). There were also a significantly higher proportion of health centre clients who had queries to submit to the providers compared to their hospital counterparts (67% versus 44%).

**Table 5.12 Clients' need for asking questions by type of service delivery points group**

| NEED TO ASK QUESTIONS | (GOV HOSP.) (N= 200) | (GOV H.C) (N= 98) | P VOL | TOTAL GOV (N= 298) | (NGO H.C) (N= 100) | P VOL. |
|---|---|---|---|---|---|---|
| Clients who has question to ask | 44% | 67.3% | .000 | 51.7% | 72% | .000 |

However, it seems that the provider, for most of the time, did not encourage the clients to ask questions, nor did they give any opportunity for the clients to ask questions. The data shows that 59 percent of Gov clients and 64 percent of NGO clients did not get any opportunity to ask the questions they intended or wanted to ask.

**Table 5.13 Responses to clients' questions by type of service delivery points group**

| RESPONSE TO CLIENTS QUESTIONS | (GOV HOSP.) (N= 88) | (GOV H.C.) (N= 66) | TOTAL GOV (N= 159) | (NGO H.C.) (N= 72) |
|---|---|---|---|---|
| Clients were not allowed to ask questions | 60.2 % | 57.6 % | 59.1 % | 63.9 % |

Within the governmental health centre, 58% of clients and 60% of hospital clients were not given any opportunity to present their questions. The differences were not statically significant either between the two sectors or within the Gov SDPs.

Failure to invite the majority of clients to ask questions suggests that many providers do not feel it necessary to engage with clients in discussions.

However, over ninety percent of those who did get the opportunity to express their concerns and ask questions in both sectors indicated that they were happy and satisfied with the responses to their questions.

### vii) Satisfying client's need to ask questions by selected socio-economic and demographic characteristics

New family planning clients seeking services at health facilities are a self-selected group with an unmet need for family planning services. Regardless of their background characteristics, they visit health facilities to seek services.

Status differences between clients and providers can influence the nature of client–provider transaction. Providers' reactions may differ based on the characteristics of their clients. This study shows evidence that providers were far more likely to give an opportunity for clients to ask questions if the clients were young, low parity or better educated, and this also appears to be the case within the governmental setting, but was not a practice in the NGO providers.

#### *a) Clients age*

The data in Table 5.14 reveals that young clients were given more of an opportunity to ask questions compared to the middle aged and elder clients. At the same time, the older clients had a better chance to ask questions than their middle aged counterparts. A significant association was found between the client's age and opportunities to ask questions within the Gov hospital, as well as the Gov health centre. However, this appears not to be the case in the NGO setting where it seems that clients were given an equal opportunity to ask questions regardless of their age background, and no significant association were noticed.

**Table 5.14 Clients who allowed asking questions by age groups and by type of service delivery points group**

| AGE GROUP | (GOV HOSP.)** | | (GOV H.C.)* | | (NGO H.C.) | |
|---|---|---|---|---|---|---|
| (YEARS) | (%) | (N) | (%) | (N) | (%) | (N) |
| 15-24 | 83.9 | (31) | 71.9 | (32) | 57.7 | (26) |
| 25-34 | 40.9 | (44) | 42.3 | (26) | 69.7 | (33) |
| 35-45 | 69.2 | (13) | 42.9 | (7) | 54.5 | (11) |
| Total | 60.2 | (88) | 57.6 | (65) | 63.9 | (70) |

*** P= .056. **P= .001**

*b) Clients level of education*

The results, as displayed in Table 5.15, shows that Gov hospital clients' level of education had a significant effect on whether they were given the chance to ask questions. As compared with women with no formal education, a high proportion of those with secondary education and above had an opportunity to be heard by the provider (40% versus 96%), and the difference was highly significant.

**Table 5.15 Clients who were allowed to ask questions by level of education and by type of service delivery points group**

| LEVEL OF EDUCATION | (GOV HOSP.*** % | (N) | (GOV H.C) % | (N) | (NGO H.C) % | (N) |
|---|---|---|---|---|---|---|
| Illiterate | 40.0 | (20) | 57.1 | (14) | 55.9 | (34) |
| <Secondary | 43.6 | (39) | 55.6 | (36) | 70.8 | (24) |
| Secondary+ | 96.4 | (28) | 62.5 | (16) | 71.4 | (14) |
| Total | 59.4 | (87) | 57.6 | (66) | 63.9 | (72) |

*** P=< .001

Interestingly, since providers generally do not ask clients about their educational attainment, their judgment is likely to be based on a visual appraisal of their clients.

This phenomenon becomes apparent in the case of health centre clients as well as their NGO counterparts, but to a lesser extent however, the association between the level of education of clients and the provision of an opportunity to ask questions were not significant for those two groups.

*c) Clients parity*

Within the governmental health centre clients with few living children were given more of an opportunity to ask questions compared to those who had up to 5 children, at the same time those who had 6 children or more were given the least opportunity to ask questions. The associations were marginally significant between the number of children and the provision of opportunity to ask

questions. For the hospital clients and the NGO clients it appears that clients with less than three living children and those with 6 or more children appear to have a better opportunity to ask questions. The association was significant in the case of the hospital clients but not significant for the NGO clients.

**Table 5.16 Clients allowed to asking questions by parity and by type of service delivery points group**

| PARITY | (GOV HOSP.)** | | (GOV H.C) * | | (NGO H.C) | |
|---|---|---|---|---|---|---|
| | % | (N) | % | (N) | % | (N) |
| 0 – 2 | 82.1 | (28) | 70.8 | (24) | 63.2 | (19) |
| 3 – 5 | 45.9 | (37) | 60.9 | (23) | 51.9 | (27) |
| 6+ | 56.5 | (23) | 36.8 | (19) | 76.9 | (26) |
| Total | 60.2 | (88) | 57.6 | (66) | 63.9 | (72) |

* P=. 075. **P= .01

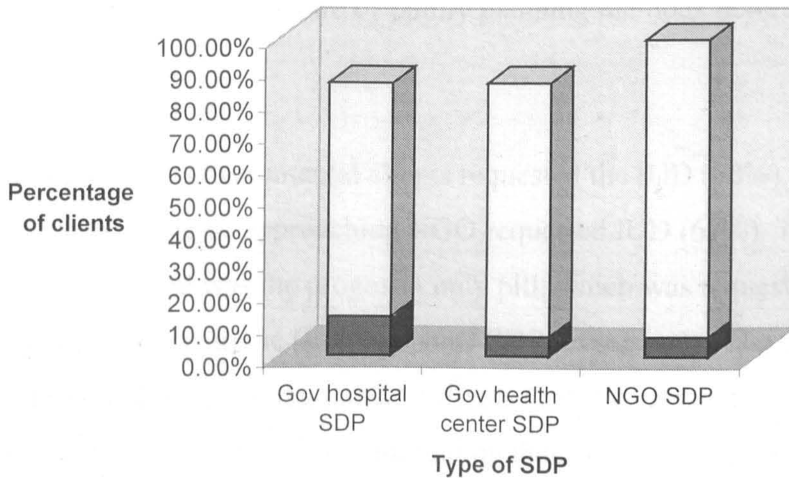
**vi) Satisfying clients need by acknowledging the medical examination or procedure beforehand and afterwards**

The data clearly shows that clients were denied the right to be informed about their medical examination or procedures they should have to undergo beforehand. Providers explained the medical examination or procedures to only 12.3% of Gov hospital clients, 6.2% for the health centre clients and 6.2% of NGO clients.

These findings are, perhaps, not surprising as providers are seen as the decision-makers and as health care personnel they are therefore perceived as knowing what is best for their clients. This mentality may not be conducive to promoting a sharing decision-taking process with their clients.

Recognizing these aspects of medical culture not only helps us understand why providers behave in certain ways, but it also helps us to understand the challenges that exist in promoting the flexible, proactive, humane and connected provider we would like to see.

**Figure 5.1**




However, on the positive side, a high percentage of clients were informed of the results of their medical examination by the providers, which is a significantly high percentage of almost 96 percent of NGO clients (p .001) compared to 79 percent of their governmental counterparts.

### 5.2.2 Choice of contraceptive methods

"Choice of method" refers both to the types of contraceptive methods available to clients at a SDP and to how clients are guided in choosing a given method.

The availability of contraceptive commodities at an SDP is an obvious prerequisite for service delivery and for the choice of methods that a provider can offer. All methods, except the progestin-only pill (in some of the Gov SDPs), were widely provided at the time of the survey.

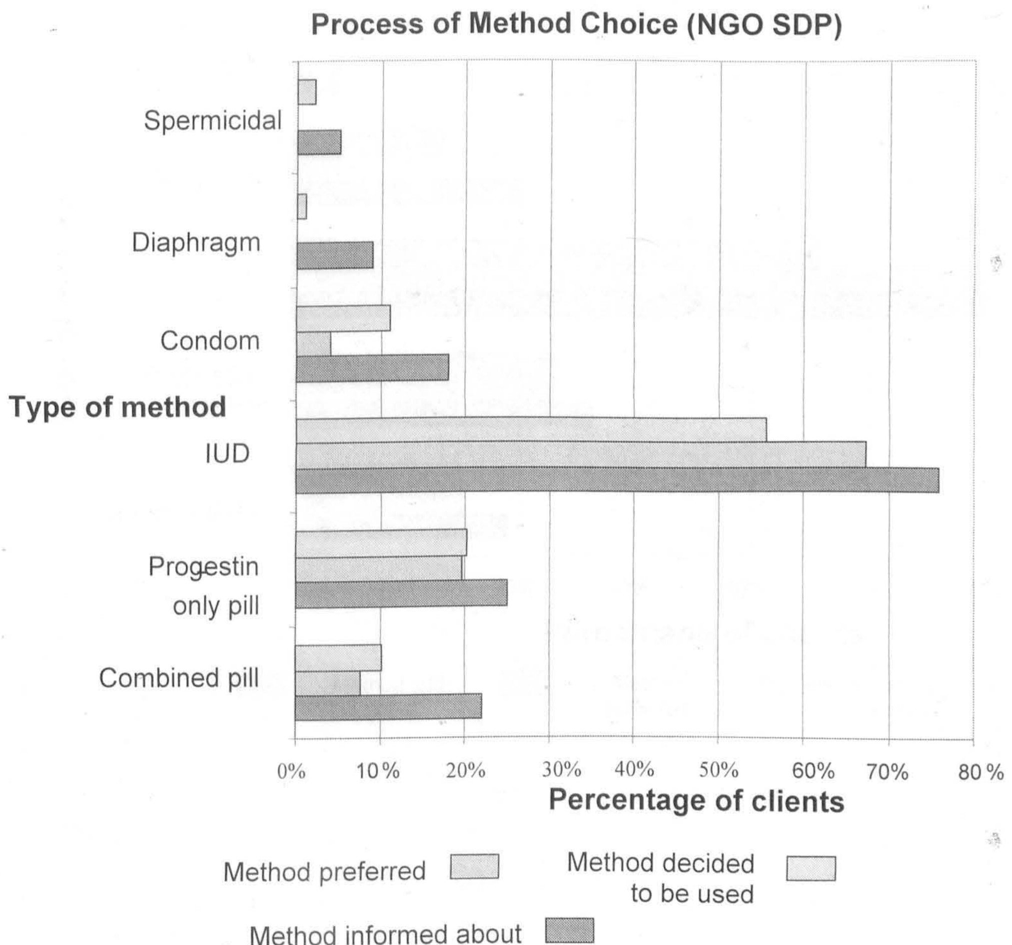
### i) Process of method choice

#### *a) Preferred method*

The data revealed that almost over ninety percent of clients from both sectors have a preference for a particular method of contraceptive. It is clear, therefore, that clients are already aware of family planning methods before they attend the clinic.

Over half of the governmental clients requested the IUD (58%), while a higher proportion of clients approaching NGO requested IUD (67%). The second most preferred method was the progestin only pill, which was requested by 23% and 20% of the clients in the Gov and NGO SDP respectively. The combined pill was preferred more among the Gov clients (15%) compared to their NGO counterparts (8%). The least requested method between both Gov and NGO clients was the condom, and this was the first choice for only 4 percent of clients.

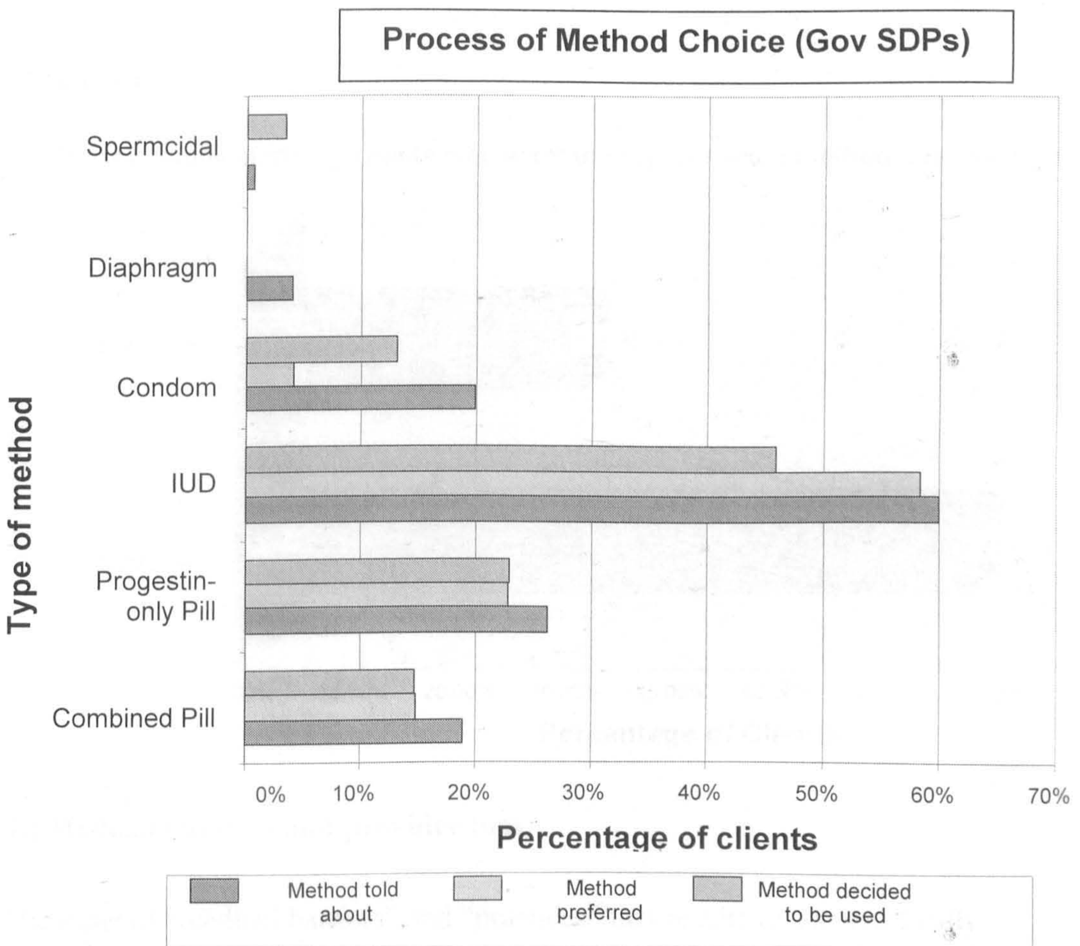
**Figure 5.2**



*b) Information given to clients about methods*

The analysis of the data shows that information was provided for a reasonable range of methods, with the exception of the permanent methods. Providers discussed the IUD with 60 percent of the Gov clients and 76 percent of the NGO clients, one quarter of clients in both sectors were informed about the progestin-only pills, and the condom was mentioned during only 20 percent of the counselling sessions in the governmental setting compared to 18 percent of the time to clients in the NGO setting. Even fewer clients were informed about spermicidal (0.7 percent in Gov versus 5 percent in the NGO) and diaphragm (9.0 percent of NGO clients compared to 4 percent of the Gov clients).

**Figure 5.3**



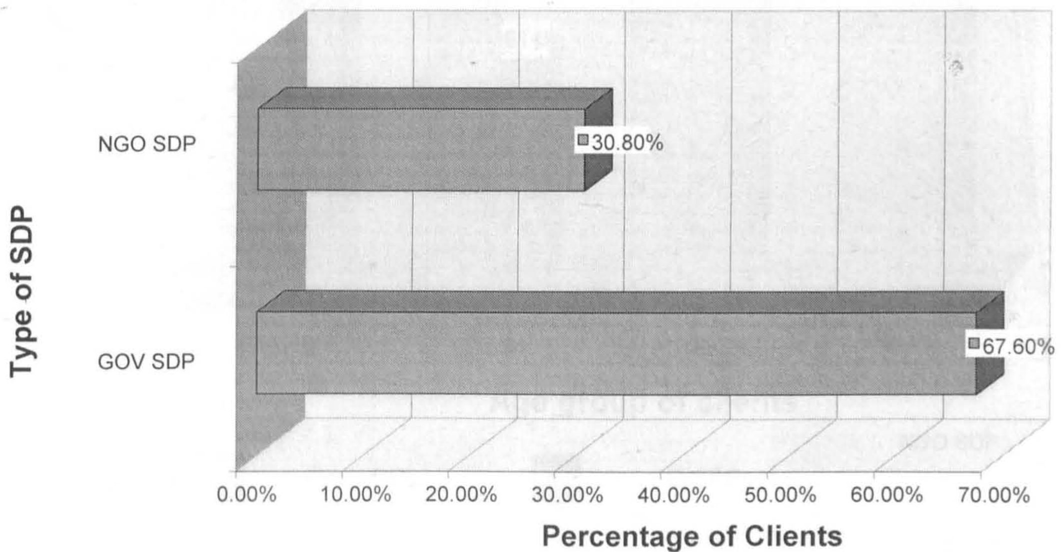
*c) Method decided to be used*

The methods decided to be used by clients were found to be similar to the method they originally preferred, which suggested that clients do insist on their first preferred method and are not affected or influenced by the discussion of other methods with the providers (see Figure 5.2).

**ii) Stop using method because of side-effect**

The analysis of the data from the exit interviews shows that a significantly higher proportion of revisit clients approaching the governmental SDP stop using their method because of side effects, compared to their NGO counterparts (p= .005). The difference between governmental SDPs (hospital and health centres) was not significant.

**Figure 5.4**




**iii) Medical barriers and provider bias**

The issue of "medical barriers" and "practices" that results in a scientifically unjustifiable impediment to or denial of contraception has received considerable attention. Among the "medical" barriers identified that influences the choices offered to clients are provider-imposed eligibility restrictions on specific

methods and the providers bias towards certain methods (Shelton et al., 1992). Service providers may limit choice to clients based on their own strong negative beliefs or attitudes towards a particular contraceptive method.

Provider restrictions of contraception based on the age of the client are implicitly reflected from the exit interviews data.

**Figure 5.5**

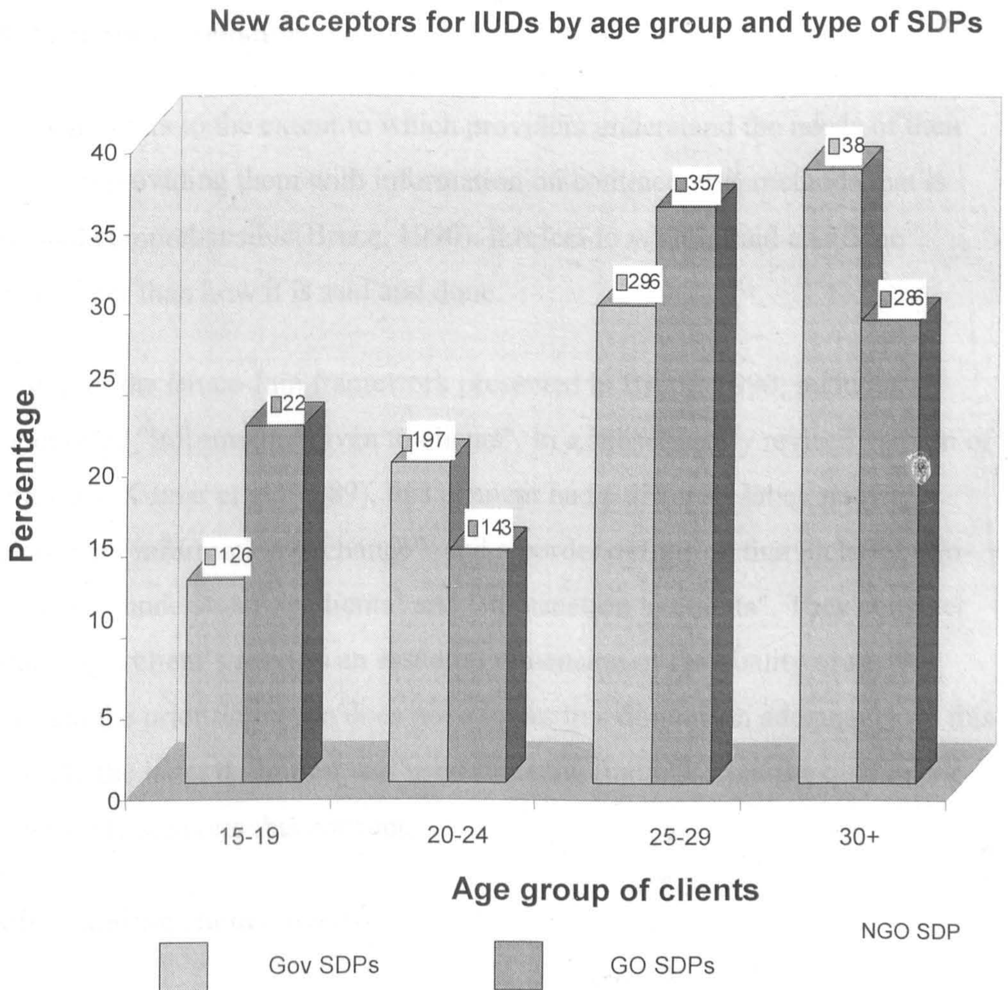



Figure 5.5 shows the distribution of clients (IUD acceptors) of Gov and NGO SDPs by age groups. At the time of their first use of contraception approximately 13 percent of Gov clients started using the contraception before the age of 20. The proportion increases to 20 percent among those in the age group 20-24 years, and IUD acceptors peaks at about 30 percent among clients in the age group 25-29 years. It steadily increases to 38 percent at age group 30 and over, probably for the purpose of limiting childbirth.

As shown in the figure, it appears that clients attending NGO SDPs were not restricted to obtaining contraceptives based on age. Almost 22% of IUD new acceptors were in the age group of 15-19 years, and the age group 20-24 years is the peak for IUD acceptors (36.7 percent). This is almost double the corresponding figure for the Gov SDP, and above the age of 30 the figure decreases to about 27 percent, which reflects the fact that NGO clients use this method mostly for spacing rather than for limiting their families.

### 5.2.3 Information exchange

This element refers to the extent to which providers understand the needs of their clients and in providing them with information on contraceptive methods that is accurate and comprehensible(Bruce, 1990). It refers to what is said and done (content), rather than how it is said and done.

The version of the Bruce-Jain framework presented in Bruce, 1990, includes an element entitled "information given to clients". In a subsequently revised version of the framework(Kumar et al., 1989), this element had a different label, namely "provider-client information exchange", and a border definition that includes two sub-elements: "understanding clients" and "information to clients". They consider understanding a client's need as an essential dimension of the quality of service delivery, and the prior definition does not address this dimension adequately. In this current study the latter definition was used since the findings from the qualitative part of the study supports this concept.

#### i) Understanding clients' needs

In general, to assist new clients in selecting the most appropriate family planning method, providers should ask them about their fertility intentions. However, the providers often failed to inquire about family planning goals and therefore frequently did not have this information.

Observers noted whether the providers and clients discussed her desire for more children; the results show that less than half of new clients (34%) in the Gov SDPs

were asked about their future reproductive goals and plans, and the corresponding figure for the NGO is even less (20%) (see Table 5.27).

The hesitation among the providers to enquire about family planning goals, especially for limiting number of children, might not be surprising given the cultural context of the setting. A significant percentage of Yemeni women (17 percent based on the 1997 YDMCHS), believe that Islam prohibits contraceptive use and for those who believe it does not prohibit use, the rationale will be the health of the mother and child through spacing of children rather than limiting their numbers. Providers are the same as clients as they are both often constrained by local beliefs and are both influenced by local culture.

**Table 5.17 Information exchange with new acceptors by type of SDP**

| INFORMATION EXCHANGE | (GOV HOSP.) (N= 110) | (GOV H.C.) (N= 54) | TOTAL GOV (N= 164) | (NGO H.C) (N= 30) |
|---|---|---|---|---|
| New FP acceptors with whom various FP issues were discussed : | | | | |
| - Whether the client wants more children in the future | 28.2 | 46.3 | 34.2 | 20.0 |
| - Age of youngest child | 85.5 | 83.3 | 84.7 | 100.0 |
| - Whether the client is breastfeeding | 70.0 | 81.5 | 73.8 | 100.0 |

Note: respondents were giving multiple responses.

Among the new family planning clients observed, 100% of the interactions included discussions of the age of the youngest child in the NGO and 84% in the governmental SDPs. In seventy four percent of the interaction in Gov SDPs there were discussions about the client's breastfeeding status, and the comparable figure for the NGO was 100%.

To counsel clients about their method choice, the provider must determine the women's breastfeeding status. Combined pills are not considered as the method of choice for breastfeeding clients, regardless of the length of time which has passed

since childbirth, because they reduce the volume of the milk the woman produces (Hatcher et al., 1998). The results show that only 3 percent of combined pill users (new acceptors) attending governmental hospitals were currently nursing. By the same token, none of the NGO nursing clients were provided with the combined pill.

**ii) Information given to clients**

The amount of information that a client should be given in order to make an informed choice about each method is a matter of debate (Bruce, 1990), as some argue that all information about every method should be provided or that each method should be introduced briefly and more information provided about those that invoke interest. At the very least, full information should be given to clients about the method they have chosen.

Clients in the exit interviews were asked questions about how the method is used to assess whether they had the correct information about it. For example, pill users were asked, "How often do you take the pill?" and "What do you do if you forget to take the pill on time". The results show that whereas all users knew that for it to be effective, the pill had to be taken daily, and almost 49% of governmental clients and 44% of NGO clients did not know what to do if they forget to take it. This low level of client knowledge about their chosen methods suggests a communication problem.

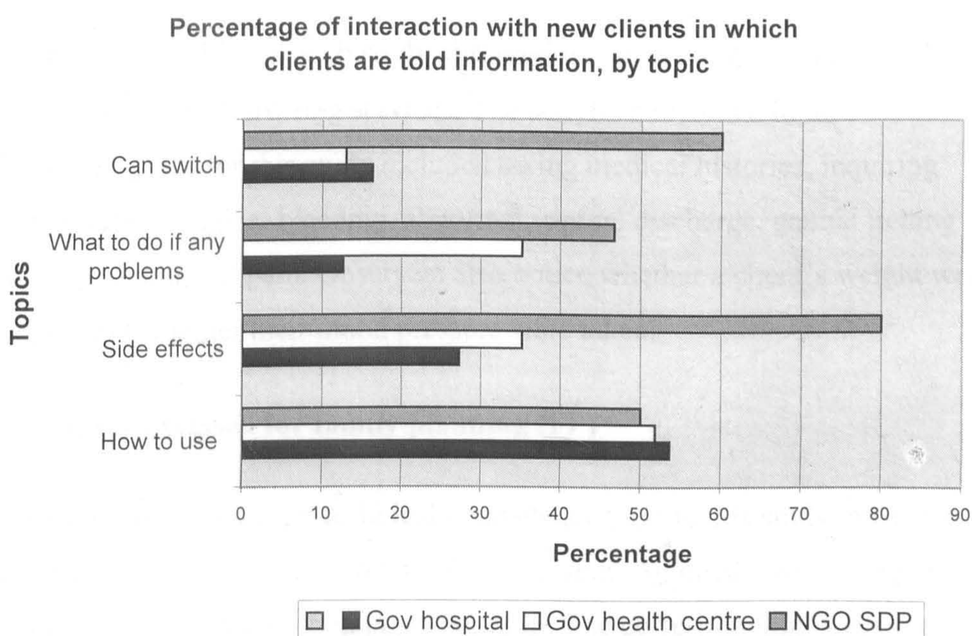
**Table 5.18 Clients knowledge about their methods by type of SDP**

| KNOWLEDGE ABOUT METHOD | (GOV H OSP.) | (GOV H.C.) | TOTAL GOV | (NGO H.C) |
|---|---|---|---|---|
| Clients who knows correct action to be taken if one pill is missed. | 48.9% | 50.0% | 49.0% | 44.0% |

According to the observers not many clients were told that they can switch method if they were not satisfied. The results ranged from only 15% in the governmental SDPs to 60% in the NGO clinics.

For a client to make an informed choice regarding contraceptive method, she (or he) should be fully cognizant of potential side effects of the methods offered. The results were less encouraging for such important dimensions as possible side effects of different methods (most notably the method accepted for use, and how to manage side effects of different methods). Eighty percent of NGO acceptors were informed by the service provider that they might experience side effects with their chosen method. The comparable figure from the governmental SDP visited is only 30%, and this pattern suggests a possible origin for the problems of discontinuation and of negative attitudes towards the method when clients experience side effects.

**Figure: 5.6**




On the positive side, the vast majority of clients, 89 percent of Gov clients and 94% of the NGO clients, found the provider easy to understand. There were no significant differences in this regard either between the two sectors or within the governmental SDP.

### 5.2.4 Technical competence

Technical competence principally involves factors such as the competence of the clinical techniques of the providers, the observance of protocols, and the meticulous asepsis required to provide clinical methods such as IUDs, implants, and sterilization (Bruce, 1990).

Some argue that all new family planning clients should be given a medical examination but, at the very least, new IUD and hormonal method acceptors should receive an examination. IUDs are generally contraindicated for women who have or who are at high risk of having reproductive tract infections and for those whom pregnancy is suspected (Hatcher et al., 1998).

**i) Undertaking medical examination and procedures**

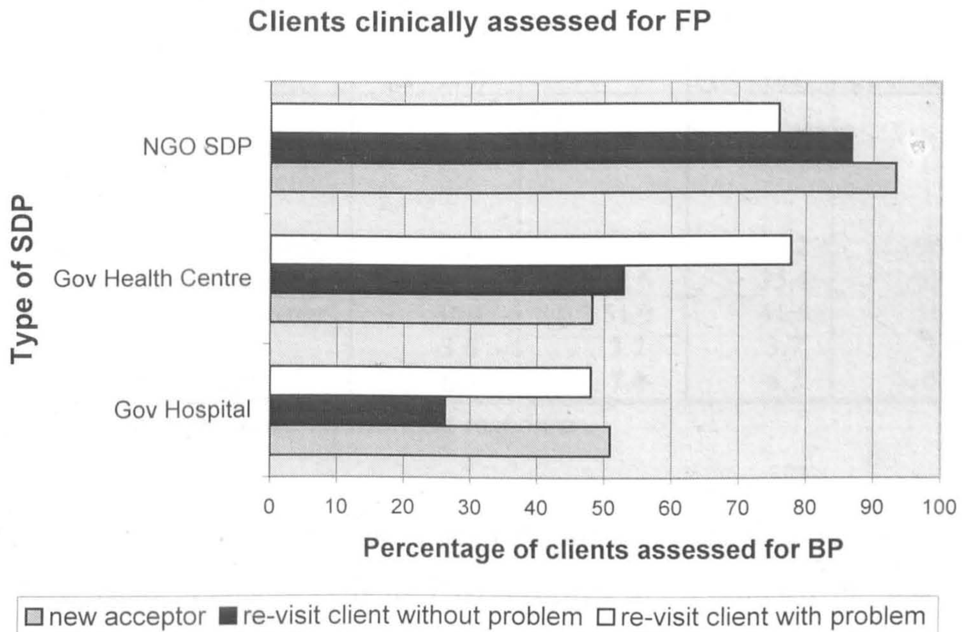
The observers of this research study observed the medical procedures followed by providers when delivering services. The activities recorded in the observation guide for this study included taking medical histories, inquiring about abnormal vaginal bleeding, abnormal vaginal discharge, genital itching and lower abdominal pain. Observers also notice whether a client's weight were assessed and whether their blood pressure were taken.

**ii) Clinically assessed for family planning (FP)**

In terms of the measures of technical competence used in this study, providers in the NGO SDP appear to be relatively competent. All clients were weighed, and 93 percent had their blood pressure taken. The corresponding figures for the Gov clients were 50% and 50% respectively.

The types of procedures expected from a provider in a clinical setting differ for new and continuing users; data were reported on such variables as weighing the client, taking her blood pressure and performing or referring for a pregnancy test.

**Figure 5.7**




The results show that still less than 60 percent of new and repeated visitors with problems in Gov SDP had their blood pressure taken, for the re-visitor client without problems, a lesser proportion of clients underwent these measures. In the NGO this measurement seems to be normal daily practice, since almost all of their clients are assessed for their weight, and all new acceptors and quite a high proportion of repeated visitors with or without problem (86% and 76% respectively) had their blood pressure taken during the visit (see Figure 5.7).

**iii) Client eligibility to FP method**

The data shows that 35 percent of Gov clients were asked if they had any vaginal bleeding and 42 percent were asked if they had any abnormal vaginal discharge, the corresponding figure for their NGO counterparts were 53% and 50% respectively. However, less than 5 percent of clients for both sectors were asked about any genital itching. In the main, ninety–seven percent of NGO clients were asked their medical history and the corresponding figure for the governmental clients were 34 percent.

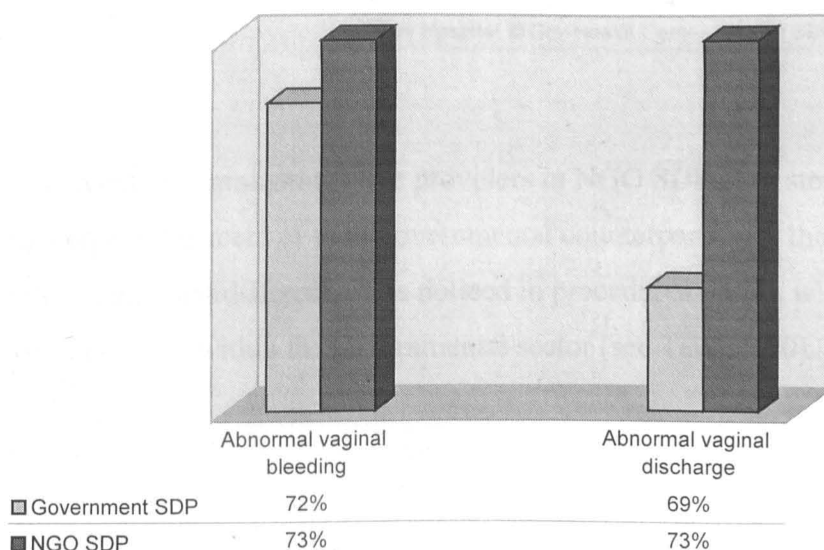
Table 5.19 **Assessment of client eligibility to FP methods by type of SDP**

| CLIENTS ELIGIBILITY FOR FP METHOD | (Gov Hosp.) (N= 110) | (Gov H.C.) (N= 54) | Total Gov (N= 164) | (NGO H.C.) (N= 30) |
|---|---|---|---|---|
| Percent of clients (new acceptor) with whom various medical issues were discussed : | | | | |
| - Any medical /family history | 27.3 | 48.2 | 34.2 | 96.7 |
| - Abnormal vaginal bleeding | 31.8 | 42.6 | 35.4 | 53.3 |
| - Abnormal vaginal discharge | 36.4 | 51.9 | 41.5 | 50.0 |
| - Genital itching | 3.6 | 3.7 | 3.7 | 3.3 |
| - Lower abdominal pain | 6.3 | 7.4 | 6.7 | 0.0 |

Note: percentage is based on multiple responses.

When the indicators verifying the issue of abnormal vaginal bleeding or discharge addressed specifically for IUD acceptors were examined, the data revealed that seventy-two percent of the IUD new acceptors observed were asked about any unusual vaginal bleeding and 69 percent were asked about any unusual vaginal discharge. The corresponding figures for the NGO clients were 73% and 73 percent respectively. As a result, still a quite reasonable proportion of family planning clients are provided the IUD without adequate screening, and the data reflects this and reinforces the need to address the fundamental issue of providing IUD in such environments.

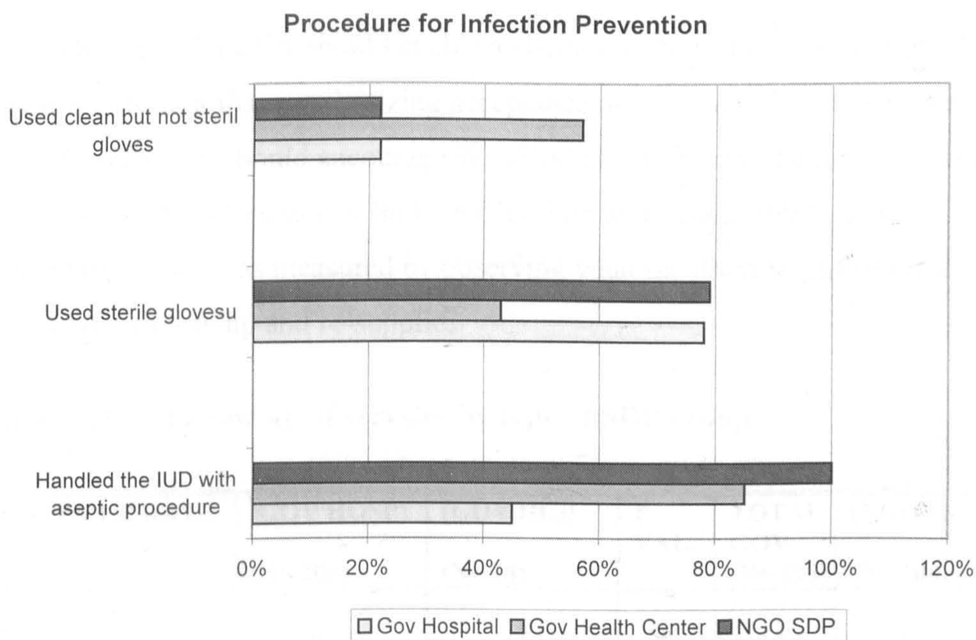
**Figure 5.8**



### iv) Maintaining aseptic procedure

Asepsis is critical during IUD insertion as it minimizes the risk of infection and, indeed, during any pelvic examination, but not all providers follow the strict aseptic techniques. In the NGO SDP providers handled IUD with aseptic procedures in all the cases observed, but in the governmental SDPs only 60 percent adopt the practice. However providers in the governmental health centre scored much better than their counterparts in the Gov hospital, as IUD were handled with aseptic procedures in 85 percent of cases in the health centres compared to 45 percent in the hospitals.

**Figure: 5.9**




In 79 percent of examinations, the providers in NGO SDP used sterile gloves compared to 62 percent of their governmental counterparts. By the same token a higher significant difference was noticed in procedures during which sterile gloves were used within the governmental sector (see Table 5.20).

**Table 5.20: Infection control procedures followed by type of SDP**

| INFECTION CONTROL PROCEDURE | (GOV HOSP.) (N=82) | (GOV H.C.) (N=74) | P VAL. | TOTAL GOV (N=156) | (NGO HC) (N= 75) | P VAL |
|---|---|---|---|---|---|---|
| Procedures during which the providers used sterile gloves | 78.0% | 43.2% | .000 | 61.5% | 78.7% | .009 |

### 5.2.5 Mechanisms to ensure continuity

Mechanisms to ensure continuity of care reflect the procedures that facilities may have in place and the actions those providers take to encourage contraceptive acceptors to continue using the services and practicing contraception.

A service of good quality should enable a client to achieve her reproductive intentions. Rather than emphasizing acceptance of a particular contraceptive method, a provider should encourage sustained use of family planning services for women seeking to space or limits births (Jain and Bruce, 1993). This element of service was measured by observing what the provider informs the client about follow-up and re-supplies.

**Table 5.21: Follow up of services by type of SDP group**

| FOLLOW UP DATE | (GOV HOSP) (N= 200) | (GOV HC)) (N= 98) | P VAL. | TOTAL GOV (N= 298) | (NGO HC) (N= 100) | P VAL. |
|---|---|---|---|---|---|---|
| Clients reporting that they were given a follow-up date | 46.0 | 39.8 | ns | 44.0 | 72.0 | .000 |

Seventy-two percent of clients who approached the NGO SDP were told when to return; the corresponding figure for their governmental counterparts was only 44.0 percent. The differences were significant between sectors and not significant within governmental SDP.

### 5.2.6 Appropriate constellation of services (accessible and convenient services).

Appropriate constellation of services refers to situating family planning services so that they are convenient and acceptable to clients, responding to their natural health concepts, and meeting their pressing health needs. Services can be appropriately delivered through a vertical infrastructure, or in the context of MCH initiatives, postpartum services, comprehensive reproductive health services, employee heath programmes, or others (Bruce, 1990).

**i) Integrating of STDs services within family planning services**

In a setting were there is no separate service for STDs like the case in Yemen it is expected that this issue would be covered within the family planning services. But the finding from the 1999 Yemen situation analysis study raises the concern that this subject is not well covered. According to the findings of 1999 Yemen SAS: no new clients were given information about sexual relations; STD/HIV/AIDS; the relationship between selected method and the prevention of STD /HIV/AIDS and only 3 percent were told about the dual protection property of condoms (i.e., they protect against STD /HIV AS well as pregnancy).

The questions addressing these issues in the standard situation analysis study within the observation guide are:

Did the provider indicate to the client that she might have an STD?
I f yes what did the provider do?
During the consultation, did the provider explicitly mention that the condom protects against STDs/HIV/AIDS?

In the same time the observers were awarded that the provider may indicate to the client that she might have and STD directly or indirectly, that she might not specifically mention the term "STD", but might use "vaginal infection", or some other term.

In the current study the same question was adopted, and another question was added based on the findings from the qualitative part of the study:

- Did the provider prescribe a medicine for treatment of STD to the client's spouse?

It was expected that this question would confirm the issue covering the STD subject within the services provided.

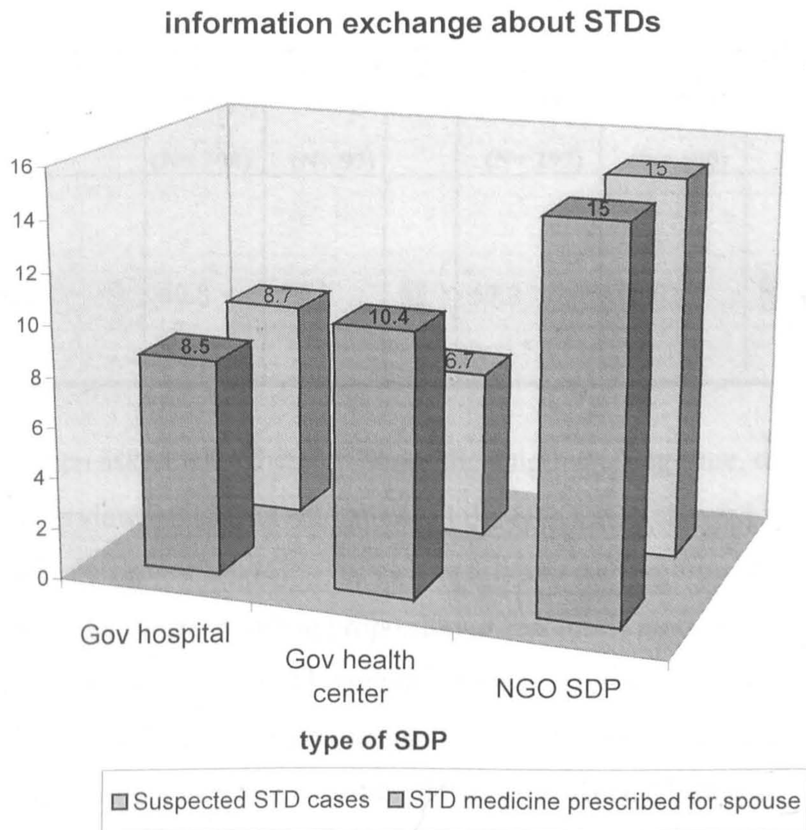
**Table 5.22 Information exchange with clients regarding STDs**

| INDICATOR | (Gov hosp.) (N= 200) | (Gov H.C.) (N= 96) | Total Gov (N= 296) | (NGO H.C.) (N= 100) |
|---|---|---|---|---|
| Percentage of clients told that condom prevents STD transmission | 5.0 | 6.3 | 5.4 | 10.0 |

The data in Table 5.22 shows that ten percent of NGO clients were informed that condom prevents transmission of STDS, compared to 5 percent of their governmental counterparts. The differences were not significant between the sectors or within the governmental SDP.

As seen from Figure 5.9, almost all clients who suspected to have STDs, the provider prescribed a medication for their spouses; the same applied with the governmental SDP, with a less percentage of health centre clients received a prescription for their husbands. This data confirms the notion that STDs is, in fact, discussed within the FP services, if not explicitly, but implicitly reflects the sensitivity of the issue in this cultural setting.

**Figure: 5.10**




### ii) Acceptability and accessibility

The length of waiting time was considered to be an important factor, which affected the acceptability of family planning services(Keller et al., 1975). Long waiting times have been shown to be "one of the most important factors in explaining the relatively high programme and method discontinuation and might also discourages acceptors from seeking programme services"(Keller et al., 1975).

When clients were asked how many minutes they had to spend at the clinic before receiving services, a significantly high proportion of clients approaching NGO SDP (78%) acknowledged that they have to wait for more than an hour compared to 57% of their governmental counterparts. The differences for clients approaching hospital and health centre governmental SDPs were not significant.

**Table 5.23 Reported waiting time for clients by SDPs groups**

| REPORTED WAITING TIME | (GOV HOSP.) (N= 200) | (GOV H.C.) (N= 97) | P VAL. | TOTAL GOV (N= 297) | (NGO H.C.) (N= 100) | P VAL. |
|---|---|---|---|---|---|---|
| > 60 minute | 60.8 | 55.5 | ns | 57.2 | 78.0 | .001 |

Moreover, when asked what they felt about the length waiting time, the results of the exit interviews of clients who attended the NGO SDP showed that a highly significant proportion (62%) of clients felt that waiting time was very long (p=. 000). The corresponding proportion of responses among their governmental counterparts was 33 percent. The average waiting time for clients who attended the NGO clinic was calculated at 2 hours and 20 minutes. The average waiting time for clients attending the governmental SDPs was calculated at 2 hours.

**Table 5.24 Clients satisfied with length of waiting time by SDP group**

| PERCEPTION OF WAITING TIME | (GOV HOSP.) (N= 200) | (GOV H.C.) (N= 97) | P VAL. | TOTAL GOV (N= 297) | (NGO H.C.) (N= 100) | P VAL. |
|---|---|---|---|---|---|---|
| Clients who felt that the length of waiting time was too long | 34.5 | 30.9 | Ns | 33.3 | 61.6 | .000 |

The analysis of data from the exit interview shows that NGO clients used different means of transportation to reach the clinic; 26.0% came by taxi, 21.0% by private cars, and 25.0% used public transportation, while only 27.0% walked to the SDP.

**Table 5.25 Accessibility to services**

| INDICATOR | (Gov Hosp.) (N= 200) | (Gov H.C.) (N= 98) | Total Gov (N= 298) | (NGO H.C.) (N= 100) |
|---|---|---|---|---|
| Percent of clients taking various means of travel to SDP: | | | | |
| a) walked | 54.0 | 32.7 | 47.0 | 27.0 |
| b) take taxi | 8.0 | 18.4 | 11.4 | 26.0 |
| c) came by bus | 34.0 | 28.5 | 32.2 | 25.0 |
| d) came by private car | 4.0 | 20.4 | 9.4 | 21.0 |

The results show that for the governmental SDPs most of their clients lived within a walking distance from the clinic (47.0 %), while 53% of clients take a different means of transportation to reach to the SDP (32% by public transport, 11.0% by taxi and 9.0% by private car).

## 5.3 CLIENTS PERCEPTION OF QUALITY OF CARE

The findings from the study of clients perception about quality of care of family planning services, are organised into six main themes based on the analysis of the transcripts from the in-depth interviews. Secondary data and analysis of service statistic data have been utilized in the presentation of the study findings.

### 5.3.1 Way of treatment

Almost all the clients in the service delivery points visited identified friendly relations as crucial for their appreciation and satisfaction with service. In their different ways clients stated that they like a friendly, welcoming and pleasant environment. When asked about the most important things they like from the clinic, four current family planning users responded:

*"The most important thing is the way of treatment."*

*"I find all the people friendly because when you go there they welcome you nicely. I don't see rude acts."*

*"A nice doctor with smiling face, who welcomes her clients, will attract them."*

*"My heart feels comfortable for the treatment in this centre. That is why I came to this centre."*

Findings from the in-depth interviews suggest that there are problems in the way of treatment of clients by the provider, which is an important reason for non-use of services.

An ex-user described her experience with a governmental health centre as thus:

*"I used to go to a government health centre. But one time the provider did not treat me well. That day I had to do laundry at home and I had a lot of housework. When I finished I went in a hurry to the centre and didn't have time to change my clothes. While inserting an IUD the doctor shout at me "couldn't you wear a clean dress when you came to the centre"? I was embarrassed and got depressed .I decided not to go to that centre again."*

Clients also expressed their need of information about different methods and, at the same time, they want an effective and guaranteed method. The exchange of information between providers and clients is critical to successful counselling of clients. Providers need to obtain crucial background information about their clients in order to determine a range of appropriate methods and to provide the information necessary for the client to make an informed choice and in order to successfully use her selected method and manage any difficulties or side effects that may arise.

A current IUD user mentioned that the information exchange between provider and clients is very important. She said:

*"Although I don't know much about medical issues, I am not a physician, I don't have medical background but I prefer that the doctor explains to me the method in a simple understandable way. If a foreign object will enter to my body it is one of my rights to know about it."*

Lack of information or misinformation may cause problems for clients. A government health centre client expressed her experience as follows:

*"When I felt that there was a small string in my underwear, I though that the IUD failed and I was very scared. That was on Thursday (the day off), I couldn't come. The next day I had my period, it was a heavy period. Also I couldn't come. Today I came and I was very worried, but finally I got relief. The doctor examined me and told me that I still have my IUD in. I didn't know what an IUD looks like; I noticed that it has a string that is why I thought it felt when I found the string."*

In most of the in-depth interviews the women expressed their interest to be shown and educated on all or a large number of methods so that they could have a variety of choices.

*"The doctor should explain to me about the different methods so that I can choose among the methods. For example the rhythm method, the pill or...any way I want to have the guaranteed method."*

The SDPs that were visited offered a range of methods, from combined oral contraceptives and progestin only contraceptive to IUDs, condom and spermicidal. The overall choice of contraceptives provided by the NGO is wider than that of their governmental counterparts and, therefore, the NGO offers a better choice of methods for their clients.

A woman who switched from a governmental health centre to an NGO clinic mentioned that: *"I switch to the NGO clinic in accordance to a friend's advice. In the NGO they have a variety of methods so that you can chose among them. I also appreciate the way of counselling in NGO. One day I saw the nurse over their have a group talk with clients and she explained to them the different methods. Just out of curiosity I attended that session. I heard them discussing some methods, which, I never heard about before, although I had already, have inserted an IUD. I was there for a follow up visit."*

The analysis of the service statistics reflect the range of method mix provided for new acceptors approaching NGO and government SDPs

**Figure 5.11:a**

FP Method Mix For New Acceptors (Governmental SDPs 2000)

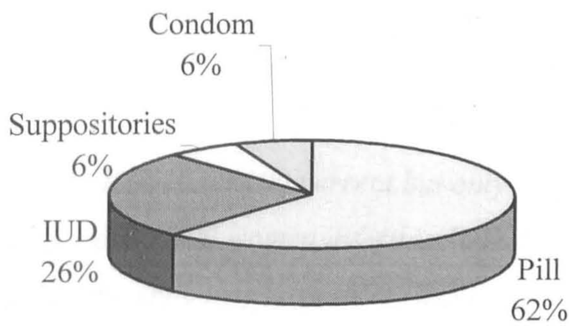
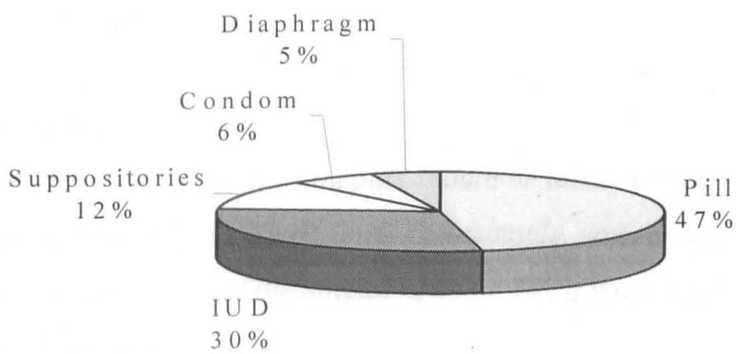



**Figure 5.11:b**

FP Method Mix For New Acceptors
(NGO SDP 2000)



The Information Education and Communication (IEC) activities were found to be too few in the governmental sector. In the NGO clinic there is a three-dimensional model of a uterus, which is used to demonstrate IUD insertion and there is also more attention paid to the counselling of clients about the different methods. The providers actively try to improve communication and provide more information to the clients. However, for most of the time, it is also a one-side conversation rather than actual counselling. The following examples demonstrate how the counselling sessions are conducted:

***Example 1***

Provider: *"The IUD is not 100 percent but only 98 percent guaranteed which means that for every 100 women inserting IUD there is a chance that 2 women will get pregnant while they have their IUD."*

The client was scared when she heard this: *"Why do you scare me?*

The reaction of the provider was as follows: *"It is not necessarily that you will be among the 2 percent, you do your best, and God will do what he wishes."*

On another occasion, another client was given the same message and her reaction was as follows:

*"I am telling you that not to scare you but to let you know just in case you hear from other women that the IUD is not guaranteed and women can get pregnant while inserting."*

***Example 2***

Provider: *"The breastfeeding pills should be taken at the same time every day or every 24 hours in a specific time. For example, you can use it at 9 o'clock every evening at the time of the official news on TV, if you forget you take it when you recall and then continue."*

### 5.3.2 Privacy during examination and consultation

Privacy during the attendance, especially during the examination of women, was identified by almost all respondents during the entire in-depth interviews as an important factor in quality services delivery.

According to the situation analysis studies conducted in more than 40 countries, including Yemen, privacy was judged by the condition of the examination room, which is thought to affect the quality of care given as well as clients' satisfaction with the SDP. Therefore auditory and visual privacy were defined as follows:

- "Auditory privacy" means a conversation between a client and a nurse or doctor cannot be heard by other clients, or that other clients might be able to see a conversation is taking place but they cannot hear what is being said.

- "Visual Privacy" means that other clients cannot see the interaction between a client and a doctor or nurse. Usually this means there is a separate private examination room, or there is an area that has a curtain or other partition which prevents other clients from seeing what is happening.

The results of the in-depth interviews and direct observation reveal that clients do not perceive privacy in the same way as the researcher perceives it. Clients-provider discussions were conducted in the presence of other clients, but most clients did not object to this situation. Most of the time the conversation converted to a group discussion and clients appreciated the views of their peers. In the in-depth interview most of the clients expressed a view that they do not object to being counselled in the presence of other clients.

*"The privacy during counselling is okay, but during examination I don't want anybody to watch me."*

*"Concerning privacy during counselling: we are all women of the same sex it is not a problem, the privacy during examination is the most important issue."*

The analysis of the in-depth interview also showed that the concern about visual privacy is mostly common among all strata of the clients, regardless of their socio- economic backgrounds. Regarding auditory privacy, young clients and those who are highly educated, still preferred to be alone during their consultation. One client mentioned that if the subject of consultation is related

to intimate relationship with her husband, then she would prefer to be consulted privately.

*"The matter of inflammation, discharge, this is a women issues, it is not a problem. I can talk about this issue without any hesitation in front of other attendants. But if it is a private thing, which I couldn't discuss it with my husband; I would prefer to discuss it privately with the doctor."*

However, visual privacy was a major concern for almost all of the clients.

*"Privacy during examination is very important. Since from the day I was born no- body watched me naked except four persons: my mother, my husband, the doctor and the nurse. In the rest of my life I don't want to be exposed to more other persons."*

*"Physical privacy is important. I would like to be alone."*

"It *is impossible to have an IUD inserted in this place, while people watch me. I came here for consultation."*

The examinations and IUD insertions were, most of the time, conducted in separate rooms or in the same room protected by a curtain. However, clients privacy was still violated by the presence of students who came from the training institute or medical school and who attended the examinations most of the time without taking consent from the client.

*"I don't have any objection that the student attended my medical exam during IUD insertion, but at least they should ask for my permission... because some clients don't like any person to watch them naked."*

*"The only thing which bothered me here was that when I inserted an IUD, there were 2 students watching me. I was embarrassed...so I closed my eyes."*

"Privacy *during examination is very important. Today I asked the students who came for training to be far away while the doctor was examining me. I didn't want them to watch me."*

This violation of privacy was the main reason that caused some clients to discontinue using the teaching hospital or to switch to another SDP.

*"One day I went to a public hospital which I believe is a teaching hospital; providers there are outnumbering the patient. While the doctor was examining me she asked for my permission for some students to attained, I accepted, but after a while another group of students, almost five students, came to attend; can you believe it, I got mad and from that day I decided that I will never ever go to that hospital."*

Another woman, who had a similar experience with this particular hospital, said: "O*ne day I had a severe bleeding and was in an emergency case. My husband took me to the teaching hospital. I was really in a bad condition. I couldn't tolerate myself, but what bothered me more is the group of students who came and watched me during my examination and the doctor explained my condition to them; I will never forget that experience."*

### 5.3.3 Good medical attention

Clients mentioned that medical examinations were an important part of the services that they expected. The client expects an examination before a method is given to them and during revisits. If this does not happen the clients feel that insufficient attention has been paid to their needs.

Some women who were attending an NGO clinic were happy that they were receiving a medical examination and they pointed this out:

"*They checked your blood pressure, they told you about different methods and the follow up. They are very caring."*

A current user who used to get her pills from a pharmacy said: "At *the beginning when I decided to use a contraceptive I just went to the pharmacy and asked for a pill, and used to get my supply from the pharmacy. One day my friend told me that this is not the right way for using the pills. She told me to go*

*to the health centre because there they will measure your weight and will assesses your blood pressure before they describe the pill. How do you know if it might affect your health? So I came to the health centre today according to her advice."*

A switcher, from one governmental health centre to another, said that the most important thing is the good medical examination: *"Over there they insert IUD without any examination, but here they asked me to do some laboratory test, so that they can see if I could tolerate the IUD or not."*

Overall, most clients were assessed with their weight and blood pressure, with a little more variation in frequency of medical histories and physical examinations. The findings on the procedure for IUD insertions were not encouraging, and the main concern was clean or aseptic procedures. Observations in SDPs visited showed that proper asepsis technique was not being maintained while inserting IUD. If the IUD insertion procedures are not aseptic, clients may be placed at risk of iatrogenic infections, and clients with undiagnosed STDs will be placed at risk of pelvic inflammatory diseases (PID). The providers of this method have a particular responsibility to protect clients against STD transmission and, in many cases, clients are not being adequately protected.

An ex-IUD user said:

*"One time I went to insert an IUD, during the insertion I noticed that the equipment for widening the uterus contained spot of blood from the previous client. When I drew the nurse's attention to that, the nurse shouted at me "this is our business" I couldn't do a thing. It is difficult to stop things at the middle of the course, so I had to continue. After that I remained for 3 months worried that I might have been infected. When I noted any sign I thought that it might be due to the contaminated instrument. Afterward things went Okay. I kept the IUD for 4 years. Thank God that was a long time ago, before the HIV/AID became common as we heard these days. Otherwise the problem could have been greater. If this happen in these days I would never accept such issue."*

A private clinic client stated: "*I thought that the private clinic might be better than the government clinic but unfortunately that was not the case. The cost is high, without good care, especially in respect to cleanness and sterilization of equipment. One day I went to a private clinic. The nurse was attempting to use the same equipment used for the client before me? I told the nurse how could you use it if it is not clean? Then the doctor told her to bring clean equipment for me.*"

On a different occasion, another client expressed her concern about the sterilization of equipment as follows: "*If the equipment is not clean it may cause an inflammation. You go to a doctor; she inserts you an IUD while you have an inflammation. They never ask you if you have an inflammation. They just insert the IUD.*"

### 5.3.4 Effects of contraceptive on health

Many women do not receive sufficient information about possible side effects of each method. What is remarkable with the following narrations is the high degree of dissatisfaction with methods, mainly as a result of the side effects the women encountered with the method.

An antenatal care client who has a 4 year old child and has had one miscarriage explained her experience with contraceptive as follows: "*I had an IUD inserted two years ago. As a consequence, I had long lasting period, some times more than ten days so I removed it and I tried the pills for 4 months. The pills caused me headache and I become nervous, shouting on my child, I stop it for one month before I got pregnant with my second child.*"

"*I tried once the pills and they made me nervous, I had a headache, I stopped using them. I tried withdrawal for one year I got pregnant. Afterwards I insert an IUD and it was okay.*"

### 5.3.5 Social and cultural barriers

#### i) Providers bias

The availability of methods to clients may be influenced by provider biases and also client knowledge. This study shows evidence that the care the providers give to their clients vary according to the provider and that not all care provided is based on current information regarding contraceptives.

During observations it was noticed that a high demand for inserting IUD occurred 35-40 days after childbirth. This is a common practice in the NGO clinic and in some governmental health centres, while some of the providers in the Gov SDPs did not favour this practice.

A prospective user who attended the health centre said: "The *last time I got pregnant while I was breastfeeding my child. They told me that I have to wait till I get my period in order to insert the IUD. Unfortunately I got pregnant; that is why I came immediately after 35 days of delivery to insert an IUD."*

After 35 days of her delivery, a mother of five children came to a governmental health centre in order to insert an IUD. The following illustrates her conversation with the provider:

**Provider**: *"I don't insert an IUD at 35 days postpartum. I do insertions after 3 months postpartum. You can take the pills that are for breastfeeding mothers, or you can come tomorrow to see my colleague doctor who does not mind inserting IUD postpartum."*

**Client**: *"Can I buy the IUD now and keep it till tomorrow?"*

**Provider:** *"The IUDs are available all the time and you can get it tomorrow when you come for insertion."*

Most providers do not appreciate female sterilization as a method of family planning and the following case illustrates this issue:

A client told her story as follows:

*"It is 13 years since I got married. Whenever I went for pregnancy test the test was positive. When I delivered my last baby at a government hospital I decided to do sterilization. My husband agrees and he was ready to sign by his ten fingers, but unfortunately the doctor did not agree. She told me that I am still young. My husband will divorce me if I got pregnant."*

The paucity of information provided about the permanent method (sterilization), might not be surprising given the cultural context of the setting.

Some providers do not want to be perceived by the client in promoting sterilization as a permanent method to limit childbearing, others are so conservative and believe that sterilization is prohibited by religious beliefs and they would never, therefore, recommend it as a method of family planning.

It should also be noted that whilst the great majority of theologians believe that contraception is sanctioned in Islam, they mostly limit the practice to temporary methods of family planning.

Moreover, results from the 1999 Yemen situation analysis study shows that providers may limit choice to clients based on their own strong negative beliefs or attitudes toward a particular method. About half of the providers (48 percent) indicated that there are methods which they would never recommend to clients under any circumstances, and the least methods they would recommend are injectable (45 percent) and tubal ligation (27 percent).

Provider restrictions of contraceptive based on the parity of the client were also apparent during observations in the health centres visited. The following is an example:

A current user came to the health centre and told her story as follows:

*"I have only one child 3 years old. My neighbour told me about this centre. I came for a follow up of the IUD. After examination the doctor told me that I have an inflammation and that I need some medication. Then she asked me how many children I have. I told her I have only one child. She said "only one*

*child!" She told me that I have to remove my IUD, and actually she removed it. My husband was waiting for me outside, he didn't want any more children, and if he got angry because I removed the IUD I will tell him that this is according to the doctor's advice."*

Again restrictions of contraceptive based on client characteristics of minimum and maximum age, number of children and husband consent were also reported through staff interviews in the 1999 Yemen situation study.

There is an underlying assumption among providers that clients know how to use condoms and thus information given about the use of condoms was scant. For example, a new acceptor said that she was just given the condoms and the provider told her to go and use condoms with her husband. She told her story:

"I *went to a health centre for insertion of IUD during Ramadan month (fasting month)... they refused to insert the IUD saying it will make spotting and it will be better if I insert it after Ramadan. They gave me condoms for temporary use. They do not explain to me how to use the condom. When I went home I tried to use the condom. But I don't know how to use it properly. Not me or my husband. I decided to insert the IUD as soon as possible.*"

Clients may be at risk of STD/HIV, injectables, and surgical methods, as they offer no protection against STD/HIV transmission. For this reason, the availability of condoms and use of dual methods are particularly crucial.

A mother of four children had been using an IUD that had been inserted in a public health facility. It gave her a lot of trouble and she wanted to have it removed. She described her experience as follows:
"I *used to bleed a lot and have lower abdominal pains. I also used to have watery discharge and a lot of itching. I though that it was the IUD which was giving me all these problems. I couldn't walk straight because of the pain I had. I decided to remove it."*

In no interactions were there any explicit discussions concerning STDs and/or HIV/AIDS.

The findings of the study revealed that the providers usually indicated indirectly to the client that she may have an STD. However, the term "STD" was not explicitly mentioned to clients and different terms were used, for example: "You have vaginal inflammation", "You have bad vaginal discharge", "You have yellowish discharge with bad odour", "You have severe inflammation, "You should stay away from your husband for few days", or "I cannot insert an IUD because you have bad discharge with an odour".

The providers rarely referred to the fact that there are certain diseases, which can be transmitted from husband to wife or vice versa. They informed the women of the need to 'take care of themselves'. The providers may prescribe medications for both the wives and their husbands, and they would inform the clients that their husbands should also use the medication. It was not apparent, even on a single occasion that the providers offered advice to clients on the use of condoms for protection.

One woman wanted the IUD removed because she was suffering from an inflammation and complaining of itching. The provider's response was as follows: odour

*"You have a yellowish bad odour discharge. The medication is for both of you and your husband. If it is limited to you, your husband will still carry the disease. Take the suppositories every night, and the capsule in the morning and in the evening. Avoid physical contact with your husband for at least 3 nights."*
Another provider, on a different occasion and setting responded as follows:

*"You have a bad vaginal discharge, yellowish in colour and its smell is not good, which means that the uterus is sick or not in good condition. Do not wash your clothes with the children's' clothes especially if you have girls. Don't let them also sleep on your bed. If it doesn't go, we will do a laboratory investigation, but first of all use this medication. You should come back for further investigation after you finish your medication."*

The terms "vaginal inflammation" and "vaginal discharge" were repeated frequently during the consultations. It was very common for a client coming for

IUD insertion to be told by the provider that, "I will insert an IUD for you but I have to see first if you have an inflammation". Or the client would say, "I intend to have an IUD inserted if I don't have any inflammation."

Although not all cases of inflammation or discharge means that the client has an STD, to the knowledgeable observer, the provider who starts the consultation with an examination followed by the prescription of drugs, can identify the suspected cases of STDs.

**ii) Obedience to husband**

In this cultural setting, most women, especially if they are uneducated, do not see any value in being the sole determinants of the practices of contraception but they preferred to take the decisions with their husbands, for without this they felt that it would encroach on their private space. They would sometimes compromise their wishes out of respect for their husband, but they were also aware of this compromise. Nonetheless, even that had its limits, when the compromise went beyond the threshold of endurance of the woman.

Some women may accept certain methods and tolerate their side effects in order to obey their husbands, especially as obedience of their husbands is a part of the cultural norms. However, it was also found that other women may overcome these cultural norms by using contraceptives without the knowledge of their husbands.

After finishing the consultation, the nurse advised a particular client (who had an inflammation) to take inflammation drugs, and she could then use and continue with the breastfeeding contraceptive pills. However, the nurse told her to avoid physical contact with her husband for 5 days. The client kept quiet for a while and looked at the nurse. The nurse repeated what she said because she thought that the client did not understand...

The client commented: *"How can I be away from my husband for 5 days, what about husband obedience!"*

A client came to a health centre for removal of her IUD. She wanted to keep the IUD in but her husband asked her to remove it because he wanted more children. She said:

*"My woman friend told me you have to fulfil your husband wishes, you should obey him, and otherwise it is against God wishes to do that. It is 'Haram'. Otherwise I was planning to live it in for longer period. "What can I do, I don't have any choice."*

Husbands might be supporters if their wives would take the burden of contraceptives with all its consequence of side effects and risks. However, they may not be as supportive if they were part of the equation, such as, if they were the ones who were to use the contraceptive method. The husbands tend to think that their support materializes in giving permission to their wives to use contraceptives and by providing them with monetary support.

*"I had to insert an IUD. I went to a private clinic. They told me to bring the new IUD from the pharmacy, which is at high price (3000YR). My husband said okay doesn't matter if it will make you feel good."*

**iii) Covert use of contraceptive**

In the literature, the common definition of "covert use" is contraceptive use without the knowledge of the spouse. Covert use represents an individual's decision to practice contraception without the direct involvement of the spouse. Covert use may have several implications for programmes in terms of the side effects of the method used, the method choice, and maintaining standards of confidentiality and privacy. Women do not undertake covert use easily, and such behaviour needs normatively acceptable justifications, because a wife must act outside of or directly against her husband's authority.

A husband's inadequate economic support of his children is cited by some of the in-depth interviewed women as persuasive justification for a woman's taking independent action. Other women may justify secret use on the basis of the

health of their children or to preserve their own health rather than on the basis of the wife's right to act on her preferences independently.

It is worth mentioning that the issue of covert use emerged in analyses of the transcripts from the in-depth interviews. In the exit interviews almost all of the women said that their husband knows they will be using a contraception .The reason for this is that most probably the women in the clinical setting will not admit to such practices due to a fear of being denied the services.

The following statements from the women illustrate this point. A client came for antenatal care from a rural area, and it took her an hour to travel to the health centre. She told her story as follows:

*"I used contraceptive pills for two years. I bought it from the pharmacy. My husband didn't know that I use the pills finally he found out. He wants many children. My husband is a colleague graduate and he also has a post-graduate degree. Although he is educated but he is closed-minded. Now I am insisting to insert an IUD after I deliver my baby (pregnant in 8 months) even if my husband doesn't agree. I am determined. I am tired; you know the amount of tasks women have to do in the rural areas of Yemen. The pills were at a time the only method which I can use without the knowledge of my husband."*

*"My husband has no a regular source of income, my children are suffering, they move about aimlessly, no food, no cloth and start begging from the streets. At the main time he doesn't want me to use any method. So I have no choice but just start a pill secretly."*

### 5.3.6: Gender role (gender inequality)

Gender–based power inequalities are a key element of the social context of reproductive health. Research shows that couples often disagree about the desirability of pregnancy and the use of contraceptives. When this discordance occurs in a situation of male authority, as is the case in Yemen,

men's opinions about the issues may overrule women's, even though the women often must implement the decisions made on these matters.

Based on the wife's perception of her husband's attitude towards family planning, the 1997 Yemen Demographic Maternal and Child Health Survey (YDMCHS) data shows that in 40 percent of the couples, both husband and wife approve of family planning, whilst 22 percent of couples both disapprove. In 12 percent of couples, the wife approves but the husband does not, while in 4 percent, the husband approves but the wife does not. There were marked differentials by level of education, and the higher the wife's level of education, the more likely it is the couple approves of family planning. Moreover the results of the survey revealed that women who have completed preparatory or higher levels of education are more likely than other women to report that their husband wanted the same number of children as they do or fewer.

**i) Men's power and contraceptive choice**

This study found that women lack the autonomy in decision making and in expressing their right to practice contraceptives. The restrictions imposed upon them in using the appropriate and preferable contraceptive method, either from their husband or as result of cultural norms and practices, is apparent.

Most DHS surveys and even situation analysis studies visualize the role of the husband to accept or refuse that his wife uses contraceptive. The surveys emphasize the importance of husband and wife discussions about family planning on the assumption that discussions between couples are a possible factor which affects family planning use and continuation. At the same time lack of any discussion may reflect a lack of personal interest, hostility to the subject, or a customary reticence in talking about sex related matters. The traditional questions for these surveys are:

- Have you ever discussed family planning with your husband?
- Does your husband know that you use or that you are planning to use family planning?

From the study, it was found that the role of the husband did not stop at this point, even if the wife had previously discussed the issue with him and obtained his approval, as the husband may still limit the method choice for his wife. The husband also my hinder their spouses access to the service by controlling the women's mobility. The in-depth interview revealed interesting findings regarding the mixed support of the women's husbands for the choice of contraceptive method and restrictions based on gender role.

**a) Hindering access to service**

It was found that most of the time husbands do not give priority to the subject of accessing services, by sacrificing part of their spare time to take their wives to the SDPs. At the same time they will accuse and blame their wives if they had unplanned pregnancies.

A client with 4 children seeking abortion services told her story as follows:

*"When I decided to use contraceptive I asked my husband to take me to the health centre. He kept telling me every day we will be going the next day and then postponing it. I went to the doctor and she gave me tablets to bring my period so that I can insert an IUD. My husband told me not to take these tablets and let the period come on time naturally. When I noticed that I got pregnant I had a shock. My husband brought me tablets from the pharmacy, which was supposed to help me get rid of the pregnancy. I took the tablets and felt some pain but unfortunately nothing happened. I am still pregnant. Today I came to this centre to see if the doctor can help me. I know this is against religion, and God will banish me, but what can I do. I have already 4 children; I can not afford to have any more."*

A client came to the health centre to have her IUD removed, and she said:

*"I have my IUD inserted one year and 5 months ago. The first year was okay, and then the situation changed to very severe pain in my back. I couldn't walk I couldn't do a thing. I don't want any more children and my*

*husband told me if I get pregnant he will throw me and my baby to the street. . I didn't try the pills before; I will try it this time."*

**b) Restricting method choice**

The male dependent method (condom) was not considered to be one of the obtainable choices for contraception offered to the client. The most frequently cited circumstance for the provision of condom is the presence of actual or perceived health-related problems relating to the wife's use of hormonal contraception or the IUD. In the main, several categories of obstacles leading to the adoption and maintenance of condom use could be identified from analysis of the interview transcripts. The most important concern is the perception that husbands may not accept to use condom, and other concerns were in the belief that condoms are fragile and ineffective as contraceptives and, therefore, risky and the fear that condom may cause inflammation and other possible side effects.

"The condom is not healthy with regard to women's health .it might cause inflammations."

The following narratives throw a light on the gender aspect of acceptance of family planning methods:

She came on the 5th day of her period in order to insert an IUD. After the examination the doctor told her that she has a medical contra-indication and that she cannot insert an IUD for her. She advised her to use the suppositories and at the same time her husband uses condom... She was very sad and with the tears on her eyes she told her story:

*"I have used pills; it caused me headache, and irregular vision and fatigue. When I stopped using them my vision became normal. The doctor told me that I cannot use an IUD and advised me to use suppositories and condom. My husband will never agree to use a condom he is not cooperative at all. For sure I didn't want to get pregnant one way or another. I will try the pills for the second time since I don't have any choice, hoping it will not cause me any*

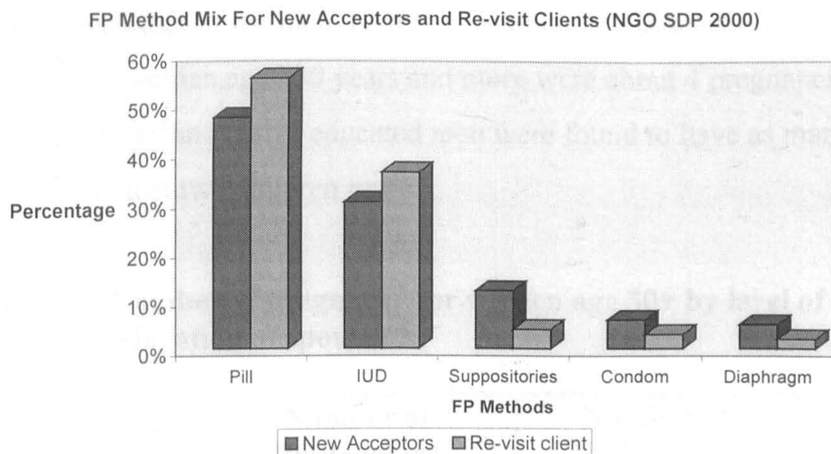
*problem this time."*

A nurse with 14 years of experience in providing family planning services said: *"The husbands do not like the condoms. They are not convinced in their use. Most of the clients return back the condom, which we distributed to them because their husbands do not like them. Every thing is according to the husbands' wishes, the opinion of the wife is not important."*

The results of the service statistics also gives some indication of the dominance of female methods over the method mix used by the couple. In general female-based method dominates for first acceptor and becomes the prominent method for the couple. As can be seen from Figure 5.11 the male method was low in general and is much lower for the revisited clients compared to their first accepted method.

The family planning method mix for the re-visit clients compared to their first accepted method is shown below:

**Figure: 5.12**




**ii) Quantitative evidence of gender role and choice of method**

Gender power structure at the spousal level is indexed by their differences in literacy and education level.

A gender gap in education was evident from the analysis of service statistical data on clients and their spouses. As Table 5.40 below shows, among 41% of couples both partners had the same general level of educational attainment; no education (13.5%), less than secondary schooling (8%) or a secondary or higher education (19.9%). However, only 21.0% of the women compared to 61.0% of the men had secondary or higher education.

**Table 5.26 Percentage of couples, by education of spouse**

| Level of Education | Husband's Education | Wife's Education | | |
|---|---|---|---|---|
| | | None | <Secondary | >Secondary |
| None | 17 | 13.5 | 2.9 | 0.5 |
| <Secondary | 21.9 | 12.9 | 8.0 | 0.9 |
| >Secondary | 61.2 | 16.2 | 25.1 | 19.9 |
| Total | 100 | 42.6 | 36.1 | 21.3 |

As expected the numbers of pregnancies decreased as the level of education of women increases. The same applies for the men, however, the relationship between women's education and number of pregnancies was found to be more pronounced than that of the men. Numbers of pregnancies for secondary and above educated women aged 30 years and more were about 4 pregnancies, and wives of secondary and above educated men were found to have as many as 6 pregnancies, almost two children more.

**Table 5.27 Number of pregnancy for women age 30+ by level of education of spouses**

| | Number of Pregnancies | Number of Cases |
|---|---|---|
| Wife's education | | |
| < Secondary | 8.0 | 288 |
| Secondary+ | 4.28 | 39 |
| Husband's education | | |
| < Secondary | 8.4 | 192 |
| Secondary+ | 6.37 | 135 |

The data also showed that highly educated husbands can achieve a smaller family size if he is married to a highly educated woman (average of 4 pregnancies). However, if he is married to an illiterate woman, the average number of pregnancies achieved could be up to seven.

**Table 5.28 Number of pregnancy for women age 30+ by level of education of couples**

| | Number of Pregnancies | Number of Cases |
|---|---|---|
| Husband secondary and wife illiterate | 7.01 | 61 |
| Husband secondary and wife secondary educated | 3.94 | 36 |

***a) Gender gap and use of contraceptive***

General education and literacy have been seen to have empowering consequences on both reproductive behaviour and reproductive autonomy. Women with some secondary education are substantially better able than less-educated women to take the necessary steps to plan their families.

It is important to note that when both partners achieve secondary education and more, the stance towards contraceptive use is most favourable. The characteristic of the revisit clients, as postulated in Table 2 shows that 25% of those clients who use a continuous method of contraception are among the secondary educated women married to secondary educated men. However, this favourableness is highly reduced when secondary educated men are married to illiterate women.

**Table 5.29 Percentage of couples, by education of spouse and use of contraceptive among re-visitors.**

| Level of Education | Husband's Education | Wife's Education | | |
|---|---|---|---|---|
| | | None | <Secondary | >Secondary |
| None | 15.2 | 12.0 | 2.9 | 0.3 |
| <Secondary | 20.7 | 12.2 | 7.9 | 0.6 |
| >Secondary | 64.1 | 19.6 | 24.2 | 25.4 |
| Total | 100% | 38.8 | 35.0 | 26.2 |

Thus, after adjusting for the influence of background factors, such as age of the woman, number of living children, duration of a marriage, in logistic regressions the odds of continuous use of contraceptive among re-visitors were found to be twice as high if the wife achieves secondary education. In the case of secondary educated husbands the odds were (1.4). If both partners were educated above secondary level the association was also found to be positive (odds 1.3). In addition, the odds of current method of use were significantly different between couples in which only the husband was a secondary graduate with an illiterate wife but in different directions (negative association).

**Table 5.30 Odds ratio from the logistic regression for predicting the continuous use of contraceptive with couple education level**

| Independent variable | Secondary Educated Wife | | Secondary Educated Husband | | Both Secondary | | Husband Secondary and Wife Illiterate | |
|---|---|---|---|---|---|---|---|---|
| | OR 95%CI | P | OR 95%C | P | OR 95%CI | P | OR 95%CI | P |
| Contraceptive use by re-visitors | 2.212 1.555 - 3.147 | **.000** | 1.400 1.03 1.89 | **.031** | 1.322 1.172- 1.491 | **.000** | .932 .865- 1.004 | .051 |

One interpretation of this result is that in cases where the wife is as highly educated as her spouse, she may have considerably more say in decision-making, in deciding the number of children to have, and in seeking the means to fulfil her desires.

***b) Condom use and gender gap (Gender gap and choice of contraceptive method)***

Table 5.43 shows a profile of condom use and associated level of couples education, such as couples in which the woman had a secondary or higher education; couples in which the woman did not attain secondary schooling; and an intermediate group of couples in which the woman had less than secondary schooling. Reported use was significantly higher for couples in which the wife had at least secondary education and the husband attended above secondary education.

**Table 5.31 Percentage of couples, by education of spouse and use of condom**

| Level of Education | Husband's Education | Wife's Education | | |
|---|---|---|---|---|
| | | None | <Secondary | >Secondary |
| None | 20.3 | 16.9 | 3.6 | .0 |
| <Secondary | 23.3 | 16.3 | 6.4 | .6 |
| >Secondary | 56.4 | 15.1 | 25.0 | 16.3 |
| Total | 100% | 48.3 | 34.9 | 16.9 |

With increased age, parity, and educational attainment, women are, to some degree, better able to negotiate condom use. In controlling this variable condom use was assessed using a logistic regression model.

**Table 5.32 Odds ratio from the logistic regression for predicting the continuous use of condom with couple education level**

| Independent variable | <Secondary educated wife | | >Secondary educated husband and <secondary educated wife | |
|---|---|---|---|---|
| | OR 95%CI | P Value | OR 95%CI | P Value |
| Condom use | 2.959 1.223-7.159 | **.016** | 1.038 1.001 - 1.078 | **.043** |

OR: odds ratio

Odds of consistent condom use were found to be elevated among women who had a secondary or higher education (odds ratio 2.95), as did, although to a lesser extent, those married to men with higher education levels (1.038). The results indicate that the level of education for educated women and for those who are married to highly educated husbands were significant predictors of condom use.

Although the negative attitude of many men to condom use within marriage no doubt serves as a barrier, it appears that the woman's perceived risk of pregnancy can override the man's objections.

In conclusion examination of the spouses' influence on each other and the use of a particular method shows that husbands have a greater control over the couple's

reproductive decision-making than their wives, especially if they are more educated than their wives, but it seems that an educated wife is more likely to achieve not only her desired family size, but also have a say in the choice of method and use of contraception in general.

## 5.4 UTILIZATION OF FAMILY PLANNING SERVICES

An examination of the utilization of service delivery points was performed by studying the SDP data on the number of new acceptors at each facility in the year preceding the facility survey.

The twenty-two SDPs in Sana'a city, handled 13,792 clients visits (new acceptors) and 33,300 re-visitors per year. This averaged approximately 627 new acceptors and 1,514 re-visitors clients per SDP per year respectively (see Tables 5.47 and 5.48).

**Table 5.33 New family planning acceptors, by type of service delivery points visited**

| TYPE OF SERVICE DELIVERY POINT | # OF NEW ACCEPTORS | % OF NEW ACCEPTORS | NUMBER OF SDP | NEW ACCEPTORS/ SDP/YEAR | NEW ACCEPTORS/ SDP/DAY |
|---|---|---|---|---|---|
| Gov. Hospital | 3534 | 25.62 | 4 | 884 | 2.8 |
| Gov. Health Center | 7185 | 52.1 | 17 | 423 | 1.4 |
| NGO. Health Center | 3073 | 22.28 | 1 | 3073 | 9.8 |
| Total | 13792 | 100% | 22 | 627 | 2.0 |

Source of data: Service Statistic of Gov & NGO SDPs.

New acceptors of family planning methods in Sana'a city are highly concentrated in a few of the SDPs. One SDP (the NGO SDP) alone handles about one quarter of the thirteen thousand, seven hundred and ninety two (13,792) annual family planning new acceptors and about 51% of the 33,300 annual total re-visitors. The four governmental hospitals cover approximately 26 percent new acceptors and only 11 percent of total re-visitors, while the 17 governmental health centers covers 52 percent and approximately 44 percent of the annual new acceptors and total re-visitors respectively.

**Table 5.34 Re-visitors to SDPs according to type of SDP Sana'a City**

| TYPE OF SERVICE DELIVERY POINT | # OF NEW ACCEPTORS | % OF RE-VISITORS | # OF SDP | RE-VISITORS/ SDP/YEAR | RE-VISITORS/ SDP/DAY |
|---|---|---|---|---|---|
| Gov. Hospital | 3534 | 10.61 | 4 | 884 | 2.8 |
| Gov. Health Center | 14554 | 43.71 | 17 | 856 | 2.7 |
| NGO Health Center | 15212 | 45.68 | 1 | 15212 | 48.76 |
| Total | 33300 | 100 % | 22 | 1514 | 4.85 |

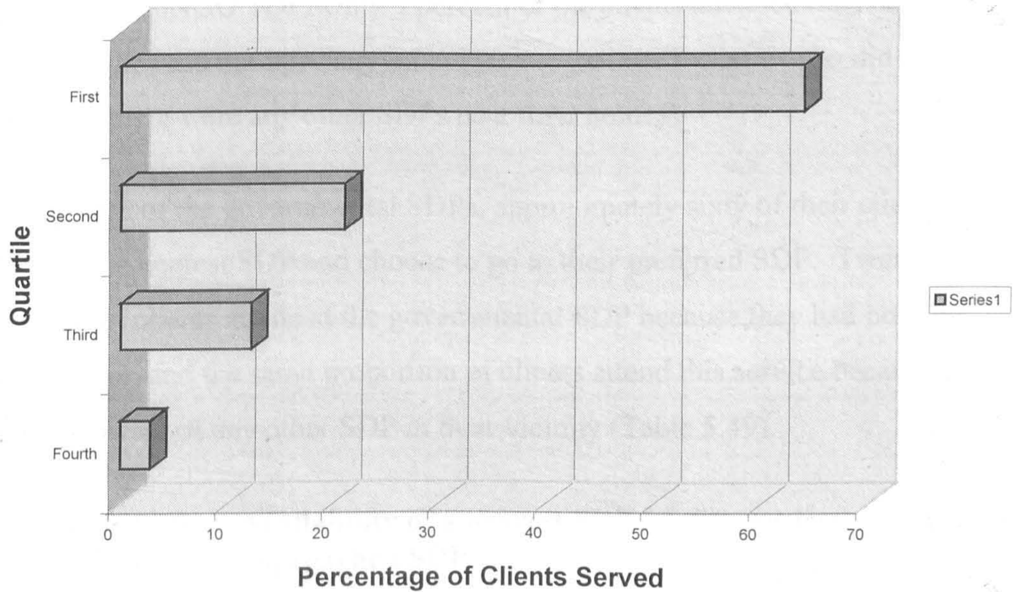
Source of data: Service Statistic of Gov & NGO SDPs

The high utilization rate of the NGO SDP is obvious compared to the governmental SDPs. On average, almost ten new clients attended the NGO per day compared to only 3 clients in the governmental hospital and just one client for the governmental health centre. At the same time the data reveals that the continuation rate is also high for the NGO clinic since, on average, the clinic received 49 re-visited clients per day while the corresponding figures for governmental hospital and governmental health centre are 3 clients per SDP per day.

The common argument is that the reason for difficulties in improving quality of care in the context of existing resources is that clinics already carry a heavy client load, which places demands on providers' time. However, the profile of client load across the SDPs, included in this analysis indicates that the most SDPs do not fit into this category.

For this study, SDPs were grouped into quartiles based on the annual clients load. SDPs in the first quartile were found to have the heaviest client loads, and those in the fourth quartile have the lightest client loads, with equal numbers of clinics placed in each quartile. The results of this analysis (Figure 5.12) show that 64% of new acceptors are served by only one quartile of the SDPs. The remaining three quartiles serve 21%, 12% and 3% of the total client load respectively.

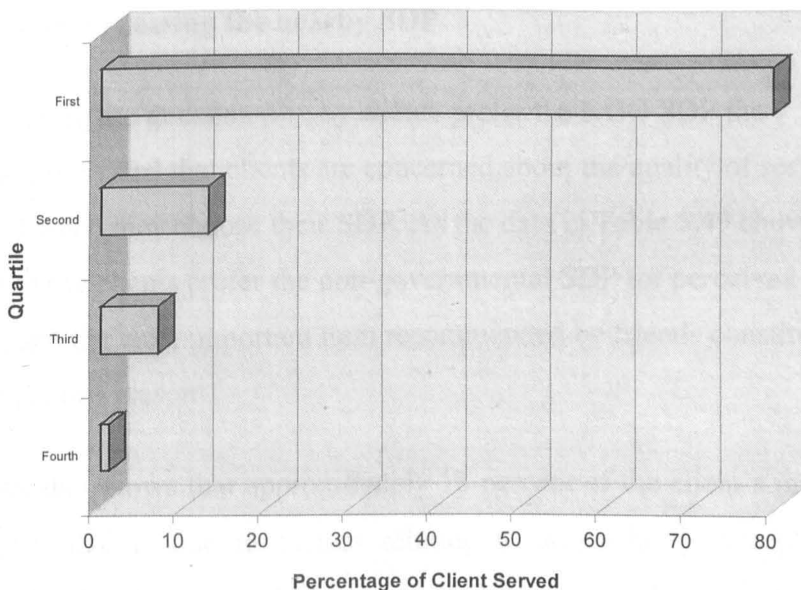
**Figure 5.13**




In addition, the proportions are very similar for re-visiting clients as well as for new acceptors, although the first quarter for the re-visitors have relatively higher load of re-visitors (approximately 80 percent), and the three remaining quartiles serve 13%, 7% and less than one percent of the total re-visitor clients load respectively (Figure 5.13).

**Figure 5.14**

**Distribution of Family Planning client load by quartile in Sana'a city (Revisit Clients 2000)**



Analysis of the exit interviews of clients who attended the NGO SDP shows that 92% of FP clients with other SDPs near to their homes preferred the NGO SDP. Likewise, 5% of FP clients with no other SDP near to their homes preferred the NGO SDP. Only 3 percent of the clients attended the NGO because they did not have any other place to go to (FP clients who did not know whether there were any other SDPs near their homes).

In the case of the governmental SDPs, approximately sixty of their clients bypass the nearest SDP and choose to go to their preferred SDP. Twenty percent of clients attended the governmental SDP because they had no other alternative, and the same proportion of clients attend this service because they are not aware of any other SDP in their vicinity (Table 5.49).

**Table 5.35 Availability of a nearest SDP for FP services, apart from the approached SDP**

| Availability of nearby SDP | Gov. Hosp N= 200 | Gov. H.C. N=98 | Total Gov N= 298 | NGO clinic N=100 |
|---|---|---|---|---|
| Available | 59.6 | 60.2 | 59.8 | 92.0 |
| Not available | 18.7 | 22.5 | 19.9 | 5.0 |
| Don't know | 21.7 | 17.4 | 20.3 | 3.0 |
| Total | 100.0 % | 100.0% | 100.0% | 100.0% |

**Reasons for bypassing the nearby SDP**

In response to the question of why clients prefer the NGO SDP the responses indicated that clients are concerned about the quality of service provided when they choose their SDP. As the data in Table 5.49 shows, 82 percent of the clients prefer the non-governmental SDP for perceived quality, and the most important item recommended by friends constitutes 51 percent for this reason.

The data also shows that approximately 18 percent of the client's preference of the NGO SDP is due to factors relating to accessibility, acceptability and affordability of services while 6 percent of clients have other reasons.

In the case of the governmental clients, 29 % choose their SDP based on their perceived quality of services. However the majority of respondents choice were dependent on factors relating to accessibility, acceptability, and most importantly affordability of the governmental SDPs compared to other nearby services. Approximately 10 percent of governmental clients gave other reasons for why they bypass the nearer SDPs.

The data shows that a higher proportion of clients (almost 48 percent) prefer the governmental health center than the governmental hospitals for family planning services, and the latter was preferred by only 19 percent of clients. Almost 24% of clients went to the governmental health center because of recommendation from their friends. However, the most striking feature of the findings is that less than one percent of clients approached the hospitals for family planning services based on friends recommendations.

**Table 5.36 Reasons for bypassing the nearby SDP**

| INDICATOR | GOV. HOSPITAL N= 200 | GOV. HEALTH CENTER N= 98 | TOTAL GOV N= 298 | NGO HEALTH CENTER N=100 |
|---|---|---|---|---|
| Friends recommend this place | 0.8 | 23.7 | 8.5 | 50.5 |
| Prefers provider here | 0.8 | 8.5 | 3.4 | 13.2 |
| Familiar with this place | 8.5 | 1.7 | 6.2 | 14.3 |
| Poor quality of services | 9.3 | 13.7 | 10.7 | 4.4 |
| **Sub-total** | **19.4** | **47.6** | **28.8** | **82.4** |
| Pill or method not available there | 0.8 | 6.8 | 2.8 | 9.9 |
| Inconvenient time | 1.7 | 1.7 | 1.7 | 0.0 |
| Take too long to get there | 0.0 | 3.4 | 1.1 | 1.1 |
| More expensive their | 56.7 | 33.9 | 49.2 | 5.5 |
| Fewer services available | 6.8 | 6.8 | 6.8 | 1.1 |
| **Sub-total** | **66.0** | **52.6** | **61.6** | **17.6** |
| Have other reason to come here | 14.4 | 0.0 | 9.6 | 0.0 |
| Grand Total | 100.0 | 100.0 | 100.0 | 100.0 |

During the in-depth interviews, clients also pointed out the reasons of why they prefer certain service delivery points. The following are examples of the narratives in these issues, which were elicited from women expressing their concerns with regards to utilization of services.

*"I live far away (in Hadda Street), from this centre. A woman friend told me about this health centre. The doctor assured me as I was scared, I didn't feel any pain during insertion of the IUD".*

*"I came to this centre from Hile Street because I have heard this centre provides good services. The most important thing is the doctor's way of treatment. If a doctor shouts at me I will never come back to the health centre".*

Clients also may prefer a SDP where there is a particular provider they like. A re-visitor to a governmental health center stated:

*"In this health center they have a nice caring doctor. Her advice was good; she was polite like a sister."*

Other clients visiting the same center on another occasion supported this view. As one responded stated:
*"I feel comfortable in this center, I use to come here, the doctor is familiar to me, I feel freely to ask her, I can understand her and she can understand me".*

Clinic switchers and discontinuers provided a special study group which was chosen to provide special insights into the reasons why people leave some services delivery points and choose others. The reasons for switching and discontinuation are explored through the in-depth interviews.

A mother of 2 children explained her experience with a health center in Al Hasaba residential area: *"In that center the treatment was not good, the doctor shouted at me. There is really a big difference in the way of treatment of people between here and there. I came to this center because my sister advised me to do so. My sister is used to come to this center".*

Another client who switched from the same health centre in Al Hasaba residential area stated: *"Here the doctor is nice; she is really sweet, and she doesn't scare the patient. After insertion of the IUD,* the doctor assured me, *I was scared. I use to go to health centre in Al Hasaba residential area, the treatment was scaring over there".*

## 5.5 IMPORTANT QUALITY ISSUE FOR FP CLIENTS AND THE RESPONSE OF THE PROVIDERS TO THOSE NEEDS

The following tables display the important quality issues for clients, and the differences in response among providers in fulfilling the needs of their clients.

The NGO service delivery point performs is comparably advanced than that of the governmental SDPs in terms of responding to the clients need for privacy during examination and consultation sessions. By the same token the NGO responds more positively to the needs of clients in informing them about the results of their medical examinations. However, both sectors were not providing the opportunity for their clients to express their concerns and ask questions (Table 5.37a).

**Table 5.37:a Response to the interpersonal relation element of quality by the two sectors (Gov and NGO)**

| 1. INTERPERSONAL RELATION | | | |
|---|---|---|---|
| **INDICATOR/ VALUE (%)** | **Gov SDPs** | **NGO SDP** | **DIFF Gov/NGO ( p value)** |
| Percentage of clients bothered by attendan of others during medical examination | 80.2 | 55.2 | ***P=.000*** |
| Percentage of clients bothered by attendan of others during their consultation | 33 | 22 | ***P=.049*** |
| Percentage of clients the Provider let them ask the question | 59.0 | 63.9 | ***P=.492*** |
| Percentage of clients reporting that physic examinations were explained to them afterwards | 79.0 | 96.0 | ***P=.000*** |

With respect to providing clients with a choice of methods, both sectors are giving almost equal opportunity for their clients to express their preference for a contraceptive method. However, a major concern is that significantly higher proportions of the governmental clients stop using their method of contraceptive due to the result of side effects (Table 5.37b).

**Table 5.37:b Response to the choice of method element of quality by the two sectors (Gov and NGO)**

| CHOICE OF METHOD | | | |
|---|---|---|---|
| **INDICATOR** | **Gov SDPs** | **NGO SDP** | **DIFF Gov/NGO ( p value)** |
| Percentage of new clients who were asked if they had a preference for a method | 97.0 | 90.7 | ***P=.010*** |
| Revisit clients who want to stop or switch, or who stop because of side-effects | 67.6 | 30.8 | ***P=.005*** |

The indicators measured the information exchange element of quality of care and it was revealed that both sectors are not responding well to the needs of their clients. The low percentages of clients who are knowledgeable about their methods suggest communication problems. However in both sectors a high proportion of clients felt that the provider was easy to understand. No significant difference was noted on the indicators between the two sectors (table 5.37:c).

**Table 5.51:c Response to the information exchange element of quality by the two sectors (Gov and NGO)**

| INFORMATION EXCHANGE | | | |
|---|---|---|---|
| | **Gov SDPs** | **NGO SDP** | **DIFF Gov/NGO (p value)** |
| Percentage of clients with whom STD health services are discussed | 5.4 | 10.0 | .109 |
| Percentage of clients who are knowledgeable about their method | 49.0 | 44.0 | .651 |
| Percentage of clients who feels that providers was easy to understand during the consultation | 89.0 | 94.0 | .315 |

With respect to the technical competence of the providers the results show that the NGO are doing relatively better than the governmental SDPs. A significantly higher proportion of their providers use sterile gloves before examining their clients (Table 5.37d).

**Table 5.37:d Response to client need for the technical competence element of quality by the two sectors (Gov and NGO)**

| TECHNICAL COMPETENCE | | | |
|---|---|---|---|
| | **Gov SDPs** | **NGO SDP** | **DIFF Gov/NGO ( p value)** |
| Percentage of procedures during which providers use sterile gloves | 61.5 | 78.7 | .009 |

The findings for the fifth element of quality shows that a significantly higher proportion of clients bypass their nearest service delivery points to approach the NGO services. Again a significantly lower percentage of clients were turned away during working hours from the NGO. However, a significantly higher proportion of NGO clients were not satisfied with the long waiting time, in comparison to their governmental counterparts (Table 5.37:e).

**Table 5.37:e Response to client need for appropriate and acceptable services by the two sectors (Gov and NGO)**

| APPROPRIATENESS AND ACCEPTABILITY OF SERVICES | | | |
|---|---|---|---|
| | **Gov SDPs** | **NGO SDP** | **DIFF Gov/NGO ( p value)** |
| Percentage of clients who bypass the neare SDP | 59.8 | 92.0 | .000 |
| Percentage of clients who have ever been turned away from this SDP during working hours | 19.8 | 7.0 | .000 |
| Percentage of clients who are unsatisfied w the waiting time | 33.3 | 61.6 | .000 |
| Waiting time of more than one hour | 57.2 | 78.0 | .000 |

With respect to the element of quality on follow-up/continuity mechanism, a significantly higher proportion of clients in the NGO compared to their counterparts in the governmental service delivery points, were given a follow up date for their next visit (Table 5.51:f).

**Table 5.37:f Response to client need for follow up and continuity mechanism element of quality by the two sectors (Gov and NGO)**

| MECHANISM TO ENCOURAGE CONTINUITY | | | |
|---|---|---|---|
| | Gov SDPs | NGO SDP | DIFF Gov/NGO (p value) |
| Percent of clients reporting that they were given a follow-up date | 44.0 | 72.0 | p=.000 |

**In summary**, the above section has presented the results obtained from the assessment of the level of quality of family planning services as provided by service delivery points in Sana'a city with respect to six element of quality. This assessment was carried out by direct observation and clients exit interview, through a survey conducted in SDPs providing family planning services in Ṣana'a city, including governmental and NGO SDPs. It also presents the findings from the assessment of clients perceptions of the quality of care of family planning services, through qualitative interviews supported by analysis of secondary data. The findings also provide the findings on the utilization of the SDPs for clients attending both governmental and NGO service delivery points using service statistic data. The important quality issues for family planning clients and the response of the family planning service providers to clients need for quality services were also identified. The following chapter will present a discussion of the results, taking into consideration the biases and constraints which may have influenced the results. It will also shed light on the conclusions that were drawn for each objective.

Table 5.38 SUMMARY OF RESULTS RELATNG TO THE RESEARCH OBJECTIVE BY TYPE OF INSTRUMENT USED

| SUMMARY OF RESULTS RELATED TO THE RESEARCH OBJECTIVES 1 AND 2 | TYPE OF INSTRUMENT |
|---|---|
| **OBJECTIVE ONE**: To measure the quality of the family planning services provided by the service delivery points (governmental and non-governmental organizations) in Sana'a city, according to the six elements of quality in the Bruce-framework.<br>**OBJECTIVE TWO**: To identify whether there are variations in the level of quality of care related to the type of service delivery points (governmental and non-governmental organizations (NGOs). | |
| **First element of quality: Interpersonal Relations**<br>• Client's need for privacy is, most of the time, not considered in both sectors, although the NGO gives relatively more attention to this aspect. | Exit interview |
| • Governmental clients were six times more likely to be bothered by attendance of other persons rather than the providers during their medical examination compared to their NGO counterparts (odd ratio 5.6, p= .003). | Exit interview |
| • Governmental clients were four times more likely to be bothered by the attendance of others during their consultation sessions compared to their NGO counterparts (odd ratio 34, p=. 05). | Exit interview |
| • Clients in both sectors (gov and NGO) were not given any opportunity to express their concerns by asking questions. | Exit interview |
| • A High proportion of clients in both sectors (gov and NGO) were not informed about their medical examination or procedures they should have to undergo beforehand. However, the providers acknowledged a high percentage of clients about the result of the medical examination. | Exit interview |
| **Second element of quality: Choice of Methods**<br>• Most clients came with a preference for a particular method and obtained their preferred method in both sectors. | Observation |
| • Clients in the governmental sector were three times more likely to stop using their methods as result of side effects, compared to their NGO counterparts (odd ratio 3.1, p=. 05). | Exit interview |
| • Providers restricted of contraception based on the age and parity of the client. | Exit interview |

| **Third element of quality: Information Exchange** | |
|---|---|
| • The providers (in both sectors) often failed to enquire about the fertility intensions of their clients | Observation |
| • Clients were inadequately informed about side effects of their methods, especially among the Gov clients. | Observation |
| • Providers gave incomplete information on how to use the method (less than 50% of clients know the correct action to take if they miss one pill). | Exit interview |
| • Lack of information given to client about the preventive effects of condom against STD/HIV infection, which raises a concern. | Observation |
| • Hormonal methods are mostly targeted to the appropriate users, and this applied for both sectors (Gov and NGO). | Observation |
| • Not many clients were informed that they can switch methods if they were not satisfied with their current method. | Exit interview |
| **Fourth element of quality: Technical Competence** | |
| • Clients in NGO are four times more likely to be examined using sterile gloves compared to their Gov counterparts. | Observation |
| • STD screening, at least through introductory questions on possible symptoms, is not carried out consistently. | Observation |
| **Fifth element of quality: Follow-up/continuity mechanisms** | |
| • The NGO providers appear to be better at informing their clients of the date for the revisit compared to their government counterparts | Observation |
| **Sixth Element of quality: Accessible and Convenient Services (Accessibility and Acceptability)** | |
| • A Significantly high proportion of NGO clients compared to the Gov clients felt that the waiting time was very long. | Exit interview |
| • It was clear that most of the clients approaching the governmental SDPs walk to the SDP and lives mainly within a walking distance from the SDP. For the NGO, few of their clients live within walking distance, and most of the clients travelled a far distance using different types of transportation. | Exit interview |

| | |
|---|---|
| • For almost all clients with suspected STDs, the provider prescribed a medication for their spouses. This data confirms the notion that STDs are in fact, discussed within the FP services, if not explicitly, but implicitly reflects the sensitivity of the issue in this cultural setting. | Observation |

**SUMARY OF RESULTS RELATED TO RESEARCH OBJECTIVE 3**

**TYPE OF INSTRUMENT:** In-depth interview

**OBJECTIVE THREE: To study the perception of the quality of care of family planning services.**

The clients views were derived by addressing the question of how clients perceived quality. This was achieved by using in-depth interviews with clients, which were complemented by direct observation of client-provider interactions and analysis of secondary data from service statistics. The clients perception of quality of care of family planning services can be summarized into six themes which emerged from the analysis of the interviews transcripts as follows:

**First theme: Good treatment**

- For most of the clients who were interviewed quality is perceived as the way of treatment they encounter.
- From clients point of view Good treatment means being attended to by staff with a good manner and a friendly attitude.
- Clients also identified staff technical competency and communication skills as a prerequisite for good treatment, as they value providers who can explain the different methods in a simple language, gives good advice and provides an opportunity for clients to ask question which leads to mutual understanding.

**Client's expressions of good treatment in their own words**

*"The most important thing is the way of treatment."*

*" While inserting an IUD the doctor shout at me ... I decided not to go to that centre again".*

*"Although I don't know much about medical issues, I am not a physician, I don't have medical background but I prefer that the doctor explains to me the method in a simple understandable way. If a foreign object will enter to my body it is one of my rights to know about it".*

**Second theme: Privacy during examination and consultation**

- From the clients point of view, privacy is defined as one who actually attends the examination and consultation session other than those involved in provision of the services (i.e. the doctor or nurse).
- The majority of the clients were disappointed by the presence of students from medical schools who attended the examination and most of the

time did so without asking consent from the clients.

- Most of the clients do not mind being consulted in the presence of other clients. Most of the time consultations converted to group discussion and clients appreciated the views of their peers.

**Client's views of privacy in their own words.**

*"Since from the day I was born no-body watched me naked except four persons: my mother, my husband, the doctor and the nurse. In the rest of my life I don't want to be exposed to more other persons."*
*"The only thing which bothers me here was that when I inserted an IUD, there were 2 students watching me. I was embarrassed....so I closed my eyes."*
*" The privacy during counselling is okay, but during examination I don't want anybody to watch me."*

**Third theme: Good medical attention:**

- For clients interviewed in the current study medical attention encompasses assessment of their weight, checking of blood pressure and acquaintance with different and effective methods.
- Clients were concerned about cleanliness of equipment and the harmful effects of unclean equipment used for insertion of IUD, as they perceive this might lead to inflammation.

**Client's views of good medical attention (in their own words).**

*"They checked your blood pressure, they told you about different methods and the follow up. They are very caring".*
*"If the equipment is not clean it may cause an inflammation."*

- **Fourth theme: Effects of contraceptive on client health**
- Clients are generally concerned about their health and the effects of contraceptive on their bodies.
- This seems to lead some clients to giving up the use contraceptives altogether, while others resorts to the use of natural methods of family planning.
- Before discontinuation, a number of clients will switch between clinics and methods hoping to find a suitable contraceptive that gives them tolerable kind of health problems.
- From the clients perspective adverse health effects encompasses, headache, irregular bleeding, heavy bleeding, mood change and nervousness. For providers these symptoms are defined as side effects, which accompany most contraceptive methods.
- While provider may not give attention to side effects, because they are not life threatening, clients mentioned that health problems resulting from contraceptive use do alter their daily lives, and this is a reason for discontinuation of their method.

**Client's views of the effects of contraceptive on their health( in their own words)**

*"I had an IUD inserted two years ago. As a consequence, I had long lasting period, some times more than ten days so I removed it and I tried the pills for 4 months. The pills caused me headache and I become nervous, shouting on my child, I stop it for one month before I got pregnant with my second child".*

## Fifth theme: Social and cultural barrier

- The client's perception of quality of care was not limited to what they get in the encounters. The restrictions they face are based on their cultural context, manifested itself through providers' biases, and the obligation to obey their husbands as a part of cultural norms.

**a) Provider bias**

Service providers may sometimes deny access to a family planning method because of their own prejudices about the method, ass well as the lack of sympathy and judgmental attitude towards the client who seeks abortion services, even if that was a result of contraceptive failure.

**Client's views of provider bias and attitude toward abortion (in their own words).**

*"It is 13 years since I got married. Whenever I went for pregnancy test the test was positive. When I delivered my last baby at a government hospital I decided to do sterilization. My husband agrees and he was ready to sign by his ten fingers, but unfortunately the doctor did not agree, she told me I am still young. My husband will divorce me if I got pregnant".*

A client came seeking a contraceptive method before she found out that she was already pregnant. The following is the conversation which took place between her and the nurse:
Client: Can you do anything for me to get rid of this pregnancy?
Nurse: Don't you know that this is against religion "Haram"?
Client: Yes I know
Nurse: So how dare you ask for it since you know? Any way we don't do abortion in this clinic.
Client: Do you know any place were I can do it?
Nurse: Go to the outpatient obstetric/Gynecological clinic and ask there.

### b) Obedience to husband and covert use:

From the in-depth interview the analysis of the transcript showed that the obedience to husband may force some women to accept a method and tolerate their side effects in order to obey their husbands since husbands' obedience is a part of the cultural norms. However, other women may overcome these cultural norms by using contraceptives without the knowledge of their husbands (covert use). Covert use may have several implications for programmes in terms of the side effects of the method use, method choice, and maintaining standards of confidentiality and privacy.

**Client's views of cultural barriers to quality care( in their own words).**

The nurse advised the client who has an inflammation to take a medication. *"But you have to avoid physical contact with your husband for 5 days".* The clients kept quiet for a while and looked at the nurse. The nurse repeated what she said because she thought that the client did not understand.
The client commented: *"How can I be away from my husband for 5 days, what about husband obedience!"*
Covert use:
*"My husband has no a regular source of income, my children are suffering, they move about aimlessly, no food, no cloth and start begging* from *the street. At the main time he doesn't want me to use any method. So I have no choice but just start a pill secretly."*

**<u>Sixth theme: Gender role :(</u>** gender disparities and power imbalance between men and women)
Gender disparities and power imbalances between men and women shapes their view about what quality services means to them. The clients frustration and disappointment from the restrictions imposed on them from their husband in using the appropriate and preferable contraceptive method were apparent. The perception that husbands may not accept the use of condom was identified from the analysis of the interview transcripts. The husbands may also hinder their spouses access to services by controlling their wives mobility.

**Client's views of cultural barriers to quality care in their own words.**
**Hindering the access and limited choice of method:**
*"When I decided to use contraceptive I asked my Husband to take me to the health centre. He kept telling me every day we will be going the next day and then postponing it. When I noticed that I got pregnant I had a shock .My husband brought me tablets from the pharmacy, which was supposed to help me get rid of the pregnancy? I took the tablets and felt some pain but unfortunately nothing happened. I am still pregnant. Today I came to this centre to see if the doctor can help me. I know this is against religion, and God will banish me, but what can I do. I have already 4 children; I can not afford to have any more."*

*"I have used pills; it caused me headache, and irregular vision and fatigue. When I stopped using them my vision became normal. The doctor told me that I cannot use an IUD and advised me to use suppositories and condom. My husband will never agree to use a condom he is not cooperative at all. For sure I didn't want to get pregnant one way or another. I will try the pills for the second time since I don't have any choice, hoping it will not cause me any problem this time".*

| SUMMARY OF RESULTS RELATED TO THE RESEARCH OBJECTIVES 4 and 5 | TYPE OF INSTRUMENT |
|---|---|
| **OBJECTIVE FOUR:** To further develop the Bruce-framework for the assessment of quality of care of family planning services. The Bruce analytical framework links the element of quality to programme effort (in term of policy, resources, and management) on the one hand and to its client-level outputs (in terms of client knowledge, satisfaction, acceptance, and continuation) on the other. | |
| Based on the findings of the current study, it can be argued that clients tend to focus upon the processes of services of care, as well as to the outcome of the services, rather than the organizational structure or policy. For clients the determinant of quality lies in their cultural reality, and they tend to focus on issues that hinder their access to quality care. Two cultural–related characteristics were identified from the study; provider bias and obedience to husband. Other important determinants elucidated were related to power imbalance between husband and wife, which reflect disparities. | In-depth Interview/ Exit interview/Service statistics |
| **OBJECTIVE FIVE:** To measure the utilization of services, in relation to type of service delivery points (governmental, non-governmental organizations). | |
| The analysis of the study revealed a clear pattern of clinic use, in that only a few service–delivery points provide contraceptive services to the majority of new family planning acceptors. Almost 64% of new acceptors are served by only one quartile of the SDPs. The remaining three quartiles served 21%, 12% and 3% of the total client load respectively. | Service statistic |
| The data suggests that clinics, as identified by clients, offer better or a wider range of services that are more heavily used. Ninety-two percent of FP clients with other SDPs near to their homes preferred the NGO SDP. In the case of the governmental SDPs, approximately sixty percent of their clients bypass the nearest SDP and choose to go to their preferred SDP. | Exit interview |
| Clients are concerned about the quality of service provided when they choose their SDP. Almost 82 percent of the clients prefer the non-governmental SDP for perceived quality, and the most important item recommended by friends constitutes 51 percent of this reason. Approximately 18 percent of the client's preference of the NGO SDP is due to factors relating to accessibility, acceptability and affordability of services. | Exit interview |
| In the case of governmental clients, 29% of respondents choose their SDP based on their perceived quality of services. However, the majority of respondents' choice depended on factors relating to accessibility, acceptability, and, most importantly, affordability of the government SDPs compared to other nearby services. | Exit interview |

# Chapter Six

# DISCUSSION

## 6. INTRODUCTION

This chapter presents a discussion of the findings as revealed by the study. It is divided into five sections. Section one sheds light on the methodological and data quality issues that relate to the validity of the finding and considers the generalisability of the data within Yemen and to other developing countries. In addition, this section discusses the limitations that were thought to have affected the data collection process and the measures taken to reduce these limitations. The remaining sections consider each of the study objectives in line with the findings generated. Comparisons are also made with the findings of previous studies within this field.

## 6.1 QUALITY OF DATA

This section looks into the validity of the study methods and findings, the limitations of the study and the various steps taken to improve the quality of the data.

### 6.1.1 Trustworthiness/credibility/validity/reliability

Reliability refers to the reproducibility and consistency of the instrument. "It refers to the homogeneity of the instrument and the degree to which it is free from error"(Bowling, 1997). "Validity is assessment of whether an instrument measures what it aims to measure" (Bowling, 1997). In the literature regarding validity and reliability in qualitative research a variety of terms are used. Some authors use the terms 'validity' and 'reliability', while others (Patton, 1990) use the terms 'trustworthiness' and 'credibility' to address similar concepts.

External validity refers to the capacity to generalised findings and develops inferences from the sample to study population. External validity answers the question of generalisability (Mays and Pope, 1995). Miles and Huberman

(1994) refer to internal validity as the crunch question-truth value. Internal validity refers to the following: Do the findings of the study make sense? Are they credible to the people we study and to our readers? Do we have an authentic picture of what we are looking at?

Quantitative research is seen as having high external validity while qualitative research is seen as having high internal validity (Miles and Huberman, 1994).

### 6.1.2 Validity of the results

This study has addressed the quality of family planning services according to the Bruce-framework for assessment of quality of family planning services which is based on the three Donabedian components of the health care quality: structure, process, and outcome. It is innovative in its attempt to incorporate the views of clients and explores how their perception coincides or differed from what the researcher claimed to be so. Research is guided by a mixed-method paradigm with quantitative and qualitative methods providing complementary perspectives on the complex issues of assessing quality of care, in order to obtain the most accurate and realistic picture for quality of care of family planning services.

The quality mechanisms put in place in this study assures the trustworthiness of the outcomes. At each stage throughout the research, efforts were made so that the research would produce trustworthy and credible results through the following:

Analysis was carried out without bias, the interpretation and results was drawn from transcripts and observations only, with no pre-conceived ideas from the researcher on the research theme.

Qualitative and quantitative data were analyzed separately but complemented each other. In applying a multiple-method approach, it enabled a process of triangulation in the final analysis phases, where the findings from more than one source of data were compared, thus, increasing the concept of trustworthiness in the research process. As Bryman states, "The researcher's claims for the

validity of his or her conclusion are enhanced if they can shown to provide mutual confirmation" (Bryman, 1988).

**I. Internal validity**

The following measures were followed to ensure the internal validity: Forward and backward translation (English-Arabic) of the exit interview questionnaires and the observation guide was carried out by local expert Arabic/English translators and re-translated into English in order to assess for inconsistencies. Persons who were not familiar with the original wording of the questionnaire conducted the back translation. Pre-testing of the questionnaires prior to the pilot study was useful in choosing the correct wording for the questions.

The quality of the data collection was assured in the following ways: Training was provided for the research team. The training was designed to familiarize the interviewers with the intent and meanings of the questions and in letting them role-play interview situations. Topic guides were pre-tested to ensure the suggested issues were appropriate for the interview, and this also assured the validity of the results. A pilot study was conducted in SDP, which was not included in the main study for pre-testing the instruments and logistics of fieldwork. . Piloting was done to provide a useful stage for learning the field process, to give the interviewer experience in actually conducting interviews in the field under supervision, to test the applicability of the instruments and for further refinement of the data collection forms. During the main data collection phase, survey forms were reviewed in order to ensure that no data had been lost.

The interviews with clients were conducted in an area as free as possible from disturbance. This ensured privacy and unrestricted participation and the clients were made to feel at ease. The interviews were conducted on the SDPs premises in a separate room. Where no separate room were available the interviews were conducted in a corner of the room where others could see that a conversation was taking place but they could not hear the actual conversations. The use of local language and local interviewer put the respondents at ease and ensured the free flowing discussion.

Clients were invited to take part voluntarily and they were assured that they could withdraw from the interview at any time. Confidentiality and safe storage of data were also guaranteed. Clients were made aware that the study was independent of the governmental authorities and that confidentiality and anonymity would be maintained throughout the research.

### II. External validity

External validity refers to the generalisability of the research results to the wider population of interest. This was maintained in the following ways:

Representativeness of the selected area: Sana'a city was chosen to represent an urban setting because of its high development infrastructure of health services, which are likely to offer a choice of facilities, methods and different institution (governmental and non-governmental organization). However, as the data collection was conducted in an urban area and one expects lower level of quality in the rural areas where managerial and physical capacity might be more defective and supervision and monitoring even more inadequate, representativeness of the data may be limited.

Representativeness of the service delivery points included in the study: All the SDPs providing family planning services within the governmental domains, including out-patient clinic at the hospitals and health centres, were included in the study (Census of the Gov SDPs). The SDPs represent a range of facilities in terms of size, capacity, range of service and location. The one clinic of the major NGO was also included as this clinic serves a wide group of people from different areas of Sana'a city thus, it was possible to obtain a wide range of views with regards to the quality of care providers in Sana'a city.

Representativeness of the study population: There were no data suggesting that the study sample varied from the general population attending the SDPs providing family planning services. The study included almost all the clients who visited the service delivery points during the study period.

Use of valid and reliable instrument for the survey: The Situation Analysis study (SAs) survey instruments that were adapted in this study had been tested and applied in more than thirty countries in Africa and Asia, as well as in some Arab countries including Yemen. Therefore, it was reasonable to suggest that the use of such instruments would provide a measure of reliability. Furthermore, as stated in Chapter Four these instruments were pre-tested and piloted prior to the main data collection phase.

### 6.1.3 Limitations of the study

Although the collection of data were carried out in accordance with the study proposal using appropriate sampling methodology, there were some limitations that were thought to have had a minimal effect on the data collection process. These limitations include the following:

Several methodological issues relating to measuring quality-of-care indicators have been elaborated by other researchers, including the reliability of data obtained from the observation model of the SA study adapted in this study, and the impact of "courtesy bias" (whereby clients understandably do not want to appear rude or ungrateful for the service they have just received), among the clients exit interviewed(Askew et al., 1994, Mensch et al., 1994).

However, the interrater of observational data from a study in Turkey SA study was assessed using teams of multiple observers. Overall, the findings suggest a strong degree of reliability. The high degree of reliability in the situation analysis observation guide is considered to be due to a relatively low level of measurement and the use of crude indicators for several dimensions of quality (Huntington et al., 1996).

The observations of the provider-client interaction were quite intrusive and were probably biased in a positive direction on the results obtained on quality of care. The providers were aware that they were being observed and, because of this, it can be assumed that they gave their best performance. However, with longer exposure, the clinic staff adjusted to the researchers presence and tended more toward their usual procedures.

One way to overcome the courtesy bias was that clients in the exit interviews were asked to report what happened during the consultation session rather than to evaluate it. At the same time in–depth interviews applied in this study represented a useful alternative for encouraging people to air sensitive issues, even in extremely closed cultures where the subject of family planning is taboo.

Client orientation and empowerment: The strength and forcefulness with which the clients expressed their views stated their definition of high-quality care was surprising. The fact that someone was asking for their opinion through the in-depth interview, and was telling them that their opinion makes a difference, seemed to increase the feeling of empowerment among the clients. Clients found that they were respected for their views and were encouraged to identify their own problems and assess the service provided from their own perspectives. This may explain why clients were found to be more critical in their views during the in-depth interview.

In summary, although these limitations introduced some degree of bias into the study results, ensuring that each step in the study proposal was carefully followed meant that potential bias in the study was minimal. Furthermore, the proposal and the instruments used in the study were piloted in a single health centre before being applied in the main study.

## 6.2 INTERPRETATION OF THE FINDINGS

The findings are discussed in relation to each of the study objectives, and comparisons are made with the findings of previous studies within the field. An overall summary corresponding to each objective are presented.

### 6.2.1 Interpretation of findings related to Objectives One and Two

**Objective One**: To measure the quality of family planning services provided by service delivery points (governmental and non-governmental organization) in Sana'a city, according to the following six elements of quality in the Bruce framework:

1) Interpersonal relations
2) Choice of methods

3) Information given to clients

4) Technical competence of providers

5) Mechanisms to encourage continuity, and

6) Appropriate constellation of services.

**Objective Two**: To identify whether there are variations in the level of quality of care related to the type of service delivery points (government and non-governmental organization).

**I) First element of quality: interpersonal relations**

An interpersonal relation is defined as the effective content of the client/provider transaction (Bruce, 1990).

Interpersonal relations are identified as one of the most difficult elements to measure because it is so subjective. The two sources of information for this element in the standard situation analysis study (SAs) are (1) observation of the client-provider interaction, on which an observer notes the providers' interpersonal treatment of the client, and (2) the exit interview, in which the client herself reports on how she was treated. Both of these approaches have methodological difficulties (Miller et al., 1997).

Third–party observation, which is relied upon for many indicators of this element, is intrusive and may influence the provider's behaviour. Clients reporting interpersonal relations inevitably are subject to "courtesy bias," whereby clients understandably do not want to appear rude or ungrateful for the service they have just received (Askew et al., 1994).

To overcome these obstacles in this study, questions were asked on events, not on opinions, and clients were asked to report on what happened during the consultation and examination session rather than to evaluate it. For example, to illustrate the issue of privacy, clients were not asked whether they felt acceptable norms of privacy were observed, but rather they were asked whether anyone was present during the examination or consultation who did not participate in providing care and how they felt about it.

The insensitivity to the client's need for privacy was evident in this study. Based on logistic regression analysis, governmental clients were six time more likely to be concerned by the attendance of others during medical examination compared to their governmental counterparts (odds ratio 5.6, p= .003). Governmental clients were four times more likely to be concerned by the attendance of others during consultation sessions compared to their NGO counterparts (odds ratio 3.4, p= .05).

More than half of the clients in both sectors (Gov and NGO) were not given the opportunity to present their enquiries or ask questions. The failure to invite the majority of clients to ask questions suggests that many providers do not feel it necessary to engage in discussion with clients. Status differences between clients and providers can influence the nature of client–provider interaction. Similar results were shown from Morocco SAs where only 21 percent of providers asked clients if they had any questions at the end of the session (Brown et al., 1995).

However, nearly all of those who had an opportunity to express their concerns and/or ask questions indicated that they were happy and satisfied with the responses to their questions. Interestingly, similar results emerge from a comparative analysis of the findings from situation analysis studies in twelve African countries; over 90% were satisfied with the responses to their questions across all study sites (Miller et al., 1998). The fact that this result is so consistently high is probably due to the courtesy bias.

Moreover, the majority of clients in both sectors (Gov and NGO) were not informed about the medical examinations or procedures they should have to undergo beforehand. This is not surprising, given the predominantly mindset of the medical field which has the provider as the decision-maker, in other words, as the health care profession traditionally casts providers as decision-makers who knows what is best for their clients. This mentality may not be conducive to promoting a sharing decision taking process with their clients.

On the positive side, a high percentage of clients were informed of the results of their medical examination by the providers, ranging from 79 to 96 percent for the NGOs and Gov clients respectively. The comparable data from the African

countries comparative SAs study shows enormous variations. Positive responses on informing clients beforehand ranged from 21% in Senegal to 92% in Tanzania and on giving clients results afterwards, this ranged from 40% in Senegal to 78% in Kenya and Botswana (Miller et al., 1998).

Over ninety percent of clients in both sectors (Gov and NGO) found the provider easy to understand. Comparable results from SAs conducted in twelve African countries shows that 96 percent or more of clients answered this question positively. However, this finding does not necessarily reflect the clients' actual understanding of the providers, because this question is also subjected to the courtesy bias.

Overall assessment of this element of quality raised a concern that clients need for privacy is, most of the time, not considered in both sectors, although the NGO gives relatively more attention to this aspect. Clients are not given any opportunity express their concerns by asking questions and for most of the time they are not informed in advance about the medical examination they should undergo, and this applies for both sectors (Gov and NGO).

**II) Second element of quality: Choice of methods**

"Choice of method" refers both to the types of contraceptive methods available to clients at an SDP and to how clients are guided in choosing a given method (Bruce, 1990).

Providers are usually expected to provide information to clients on available methods based on the needs of the individual client and the appropriateness of the particular method for the client. However, there is some disagreement about whether providers should discuss alternative methods when clients express a method preference. Some providers argue that clients should still be informed of other methods irrespective of their initial preference, while others are of the opinion that it is appropriate to educate clients only about their preferred method (Pariani et al., 1991).

In general, clients expressed few complaints regarding the availability of methods and most of the clients already had a preference for a particular

method. This finding is in line with other studies conducted in Yemen, Morocco and Senegal (Brown et al., 1995, Miller et al., 1998, MOPH et al., 1999).

Providers gave information to the clients about different methods almost in the same proportion as the clients expressed a preference, which suggests that providers narrowed their consultation to the original method preferred by the clients unless there was a contraindication to the method. In any case, the method finally decided upon by clients was similar to the method that was originally preferred by them, suggesting that clients insist on their first preferred method and are not much affected by the discussion of other methods with the providers.

Of the methods mentioned or not mentioned to clients, the one that warrants most concern was condom (the least recommended method). Failure to mention condom may reflect the providers' discomfort with discussing sexual relations with clients, although this is conjectural or, most probably, they do not really expect men to use them. Not mentioning condom as a choice to clients is also recorded in the findings of SAs in two African countries, namely, Senegal and Cote d'Ivoire (Miller et al., 1998).

Overall, based on the indicators used to assess this element of care, it seems that both sectors are performing well in terms of providing clients with their preferred methods of contraceptive. Although the data shows that less information is given about condom, in fact condom is also the least preferred method by clients.

### III. Third element of quality: Information exchange

This element refers to the extent to which providers understand the needs of their clients and provides them with information on different or choice of contraceptive methods that is accurate and comprehensible(Bruce, 1990).

Evidence from the study reveals major problems with this aspect of quality. The providers (in both sectors) often failed to inquire about fertility intention of their clients. This piece of information is important in order to assist new clients in choosing the most appropriate family planning method, either for spacing or

limiting purposes. The hesitation among the provider to inquire about a family planning goal, especially for limiting number of children, might not be surprising given the cultural context of the setting. Seventeen percent of the population of Yemen believe that Islam prohibits contraceptive use by women (CSO and MI, 1998) and for those who do not believe that contraceptive use is prohibited, the rationale will be for the health of the mother and child through spacing rather than limiting their births. Providers are like their clients, as providers themselves are often constrained by local beliefs and are also influenced by local culture.

Clients are inadequately informed about side effects of their methods, especially among Gov clients. The proportion of clients who were informed that they might experience side effects with their methods was ranged from one-third among the Gov clients to almost eighty percent between their NGO counterparts. Similar findings emerged from SAS for twelve African countries, where the proportion of clients who were informed about side effects ranged from 24% in Burkina Faso to 68% in Botswana (Miller et al., 1998).

Awareness of side effects is particularly important since it is a common reason for discontinuing many methods of contraceptive (Ross J and E .Frankenberg 1993). In fact, the findings from the logistic regression model reveals that clients in the governmental sector are three times more likely to stop using their methods as a result of side effects, compared to their NGO counterparts (odds ratio 3.1, p= .05).

Another shortcoming which was identified in the assessment of this element of quality is the fact that providers gave incomplete information to clients on how to use the method. This is an especially important point for users of pills and condoms, which are particularly user dependent. For example, whereas all users knew that the pill had to be taken daily, in order to be effective, less than 50 percent of clients in both sectors knew what to do if they forgot to take it. Interestingly very similar results are found in Egyptian and Moroccan studies where 60 percent and 41 percent of clients respectively did not know what to do if they forget to take the pills (Brown et al., 1995).

The lack of information given to clients about the preventive effects of condom against STD/HIV infection raised some concern. The proportion of clients informed were only ten percent of NGO clients and 5 percent of their governmental counterparts, as compared to the results for twelve African countries which ranged from 2 percent in Senegal to 33 in Botswana (Miller et al., 1998).

On the positive side, providers in both sectors were found to enquire about their clients breastfeeding status in over 70 percent of clients. A comparable result from twelve African countries shows two countries with a predominately Muslim society rate high in this indicator (Senegal 79 percent and Zanzibar 78 percent), while the corresponding figures for the other ten countries range from as low as 28 percent in Ghana to 66 percent in Cote d'Ivoire.

The combined contraceptive pills (COCs) are not considered appropriate for breastfeeding women because oestrogen can affect the quality and quantity of breast milk (Hatcher et al., 1994). In fact only 3 percent of combined pill users (new acceptors) attending governmental hospitals and none of their NGO counterparts were currently nursing, which suggests that Yemeni providers are doing a good job in this regard. In contrast in a Nigerian study 27 percent of combined pill users were currently nursing (Askew et al., 1994).

Overall, the results on the assessment of this element of quality reveal serious shortcomings in obtaining critical information from clients. Information given to clients is an extremely weak programme element in both sectors, both in terms of family planning information and even more so in terms of STD/HIV information. On the positive side hormonal methods are mostly targeted at the appropriate users, and this applied to both sectors (Gov and NGO).

### IV. Fourth element of quality: Technical competence

Technical competence involves, principally, factors such as the competence of the clinical technique of providers, the observance of protocols, and meticulous asepsis required to provide clinical methods such as IUD, implants and sterilization (Bruce, 1990).

In terms of some of the measures of technical competence, such as measuring client's weight, and taking blood pressure and medial history, both sectors performances were acceptable, however, the NGO SDP appeared to be relatively more competent than their governmental counterparts.

Since family planning clients are sexually active, they are at risk for STDs and therefore should be screened. On the other hand, IUD clients are arguably the most in need of STD screening because of the risk of Pelvic Inflammatory Disease (PID) with IUD insertion. A study among rural women in Egypt found that IUD use was a risk factor for gynaecological morbidity, due to inadequate screening for pre-existing infection (Zurayk Huda et al., 1994). However, the exact screening questions that should be used are a subject of controversy since not all symptoms are indicative of STD infection. Moreover, a client's judgment about what constitutes unusual symptoms or even pain can vary greatly, so reporting of physical symptoms may not be fully informative (Miller et al., 1998).

Nevertheless, the crude measures adopted in SAs, can shed light on adequacy and shortcomings in providers performance with regard to this element of quality. Less than forty percent of clients approaching governmental SDP compared to sixty percent among their NGO counterparts were asked whether they had any unusual vaginal bleeding or discharge. A comparable result from the Africa SAs studies shows that in eleven of the study sites, half or fewer of new clients had been asked about unusual bleeding or discharge(Miller et al., 1998).

In fact the data from this study revealed that IUD clients are screened more often for STDs than other clients, and the data from 12 African countries were also similar. Nonetheless, there is quite a reasonable proportion of family planning clients who are provide the IUD without adequate screening, and the data reflects this and reinforce the need to address the fundamental issue of providing IUD in such environments.

Asepsis is critical during IUD insertion to minimize the risk of infection, and indeed during any pelvic examination, unfortunately not all providers follow

strict aseptic techniques. For example, in all the cases observed, even though the NGO providers handle IUD with aseptic procedures, only 60 percent of their governmental counterparts use such practice. The use of sterile gloves is also particularly important for averting infections, but again, sterile gloves were not used during most cases of examination. The findings reveal that sterile gloves were used in a significantly high proportion of cases in the NGO compared to the Gov SDP. Logistic regression analysis revealed that clients in the NGO are four times more likely to be examined using sterile gloves compared to their Gov counterparts. However, given the importance of this procedure in protecting a client from the risk of infection, this should be a standard procedure in every SDP.

Overall, most clients in both sectors are assessed with weight, blood pressure, with a little variation in frequency of medical histories and physical examinations. Findings on the quality of pelvic examinations and IUD insertions were not encouraging for both sectors. The main concern was in not using clean or aseptic procedures, particularly with the use of sterile gloves during pelvic examinations. The study results indicate that STD screening, at least through introductory questions on possible symptoms, is not being carried out consistently.

### V. Fifth element of quality: Follow-up/continuity mechanisms

Mechanisms to ensure the continuity of care reflect the procedures that facilities may have in place and the actions those providers take to encourage contraceptive acceptors to continue using services and practicing contraception. A service of good quality should enable a client to achieve her reproductive intentions; rather than emphasizing acceptance of a particular contraceptive method, a provider should encourage sustained use of family planning services for women seeking to space or limits births (Jain and Bruce, 1993).

This element of service was measured by observing what the provider tells the client about follow-up and re-supply.

The NGO providers appear to do a better job as far as informing their clients of the date for the revisit compared to their governmental counterparts, where three quarters of their clients are informed of their follow up visit, compared to less than fifty percent of governmental clients. However, it can be argued that giving the follow up date does not guarantee the client will visit the clinic as scheduled, especially in the absence of a real mechanism of follow up. This might be even more important in this setting where women may face cultural obstacles for revisiting the clinics, which underlines the importance of follow up mechanisms to ensure continuity of services.

Another even more important aspect regarding this element of quality was the finding that not many clients were informed that they can switch method if they were not satisfied with their current method, and the results ranged from only 60 percent in the NGO SDP to just 15 percent in the Gov sector. This omission could undermine the client's continued use of the method. If clients are aware that they can switch methods should they encounter problems, they may be more likely to return to the SDP for a new method rather than to discontinue altogether (Ross J and E .Frankenberg 1993).

Comparable findings for SAs in twelve African countries in this aspect of quality reveals that giving clients a return visit date appears to be a fairly standard practice across all the study sites. The results ranged from 78% of clients in Zimbabwe to 100% in Senegal. However, not many clients were informed that they could switch methods. The results ranged from only 11% in Ghana to 54% in Zanzibar(Miller et al., 1998).

### VI. Sixth Element of quality: Accessible and Convenient Services (Accessibility and Acceptability)

Waiting time was considered an important factor which affects the acceptability of family planning services. Long waiting times have been shown to be "one of the most important factors in explaining the relatively high programme and method discontinuation and may also discourage acceptors from seeking program services"(Keller et al., 1975).

In the standard SAs study clients were asked to estimate how long they waited before getting the services and whether they considered this long length of time to be reasonable. This type of estimate is not generally reliable. For this study, the questions were modified and administered to estimate the waiting time, and clients were asked at what time she arrived to the service delivery point. The interviewer also reported the exact time at the exit interview when the client had finished getting the services, in order to reach to a reasonable estimate of time which had elapsed between the arrival time to the time of discharge. At the same time, the clients were asked about their opinion of the waiting time from the time of arrival till the time of the exit interview during the exit interview. The client's opinions on the acceptability of the waiting time revealed whether they were waiting too long, however they defined it.

Clients approaching the NGO complained of the long waiting time, and almost more than three quarter of the clients had to wait for an average of an hour before they get the services, the clients of the government SDPs by comparison had a shorter waiting time. Moreover, when asked what they felt about the waiting time, a significantly higher proportion of NGO clients compared to the Gov counterparts felt that the waiting time was very long.

As an approximation of the physical accessibility to the SDPs, clients were asked about the means of transportation they used to access the clinic. From the results it was clear that most of the clients approaching the governmental SDPs walk to the SDP and mainly live within a short distance from the SDP, although some of them took different type of transportation. For the NGO clinic, it was found that a few of their clients live within walking distance, and most of the clients came from far distance using different types of transportation, either public or private transport. Given the fact that clients in this setting were not restricted by a defined catchments area, the findings suggest that people try to reach the preferred clinic regardless of how far it is and whatever it might cost them.

### 6.2.2 Interpretation of findings related to Objective three

**Objective 3:** To study client's perception of quality of care of family planning services.

This study clarifies what quality of care means to clients, and it helps to describe the quality of service received from the client's point of view. At the same time, it provides an opportunity to examine whether the key dimension of quality as identified by the experts, is perceived and defined differently by the clients.

The clients views were derived by addressing the question of how clients perceived quality. This was achieved by using in-depth interviews with clients which were complemented by direct observation of client-provider interactions and with the analysis of secondary data from the service statistics.

The client's perception of quality of care of family planning services can be summarized into five themes emerged from the analysis of the interviews transcripts as follows:

**I. First theme: Good treatment**

For most of the clients who were interviewed quality means the way of treatment they encounter, and this coincides with the definition of quality as postulated by Anrudh Jain, who defines quality of care in family planning as *"the way clients are treated by the system providing these services"* (Jain, 1992).

Clients perceive good treatment as being attended to by staff who have a friendly attitude and a good manner: (a nice, friendly, polite, caring provider, who welcomes the clients nicely, do not show rude acts, do not embarrass their clients or shout at them). The clients also identified staff technical competency and communication skills as a prerequisite for good treatment, they value providers who can explain the different methods in a simple language, gives good advice and provides an opportunity for clients to ask question which leads to mutual understanding. This finding is in line with many studies which

pointed to the importance of good treatment for clients (Koenig et al., 1997, Lei et al., 1996, Sealza, 1994, Simmons et al., 1986, Vera, 1993) .

**Box 6.1: Client's expressions of good treatment (in their own words)**

*"The most important thing is the way of treatment."*

*"My heart feels comfortable for the treatment in this centre. That is why I came to this centre".*

*While inserting an IUD the doctor shout at me ... I decided not to go to that centre again*

*They do not explain to me how to use the condom. When I went home I tried to use the condom. But I don't know how to use it properly.*

*"The doctor should explain to me about the different methods so that I can choose among the methods. For example the rhythm method, the pill or...any way I want to have the guaranteed method"*

*"Although I don't know much about medical issues, I am not a physician, I don't have medical background but I prefer that the doctor explains to me the method in a simple understandable way. If a foreign object will enter to my body it is one of my rights to know about it".*

*"I feel comfortable in this centre, I use to come here, the doctor is familiar to me, I feel freely to ask her, I can understand her and she can understand me".*

## II. Second theme: Privacy during examination and consultation

Privacy from the client's point of view is defined as those who actually attend the examination and consultation session other than those involved in the provision of services (i.e. the doctor or nurse). The majority of clients were disappointed by the presence of students from medical schools, who attended the examination and most of the time without even asking the consent of the clients. However, most of the clients do not mind being consulted in the presence of other clients. Most of the time the consultation converted to a group discussion and clients appreciated the views of their peers.

This perception of privacy is in contrast to expert definition of privacy adapted in the standard SAS, including the one conducted in Yemen. Privacy during examination was judged by the provision of private space during examination (which means there is a separate examination room that is private or there is an area that has a curtain or other partition which prevents other clients from seeing what is happening). Privacy during consultation was judged by the provision of a private environment (which means that a conversation between a client and a nurse or doctor cannot be understood by other clients, and that other clients might be able to see a conversation that is taking place but they cannot hear what is being said).

**Box 6.2: Client's views of privacy (in their own words)**

*"Since from the day I was born no-body watched me naked except four persons: my mother, my husband, the doctor and the nurse. In the rest of my life I don't want to be exposed to more other persons."*

*"It is impossible to have an IUD inserted in this place, while people watch me. I came here for consultation."*

*"The only thing which bothered me here was that when I inserted an IUD, there were 2 students watching me. I was embarrassed...so I closed my eyes."*

**III. Third theme: Good medical attention**

For clients interviewed in the current study medical attention encompasses assessment of weight, checking blood pressure and being acquainted with different and effective methods. This is in line with other studies (Ndhlovu, 1995) . Clients were concerned about cleanliness of equipment and the harmful effects of unclean equipment used for insertion of IUD, which clients perceived as leading to inflammation. This perception supports the argument that clients lack the ability to full evaluate clinical competence, but they bear the consequence of poor technique (Bruce, 1990).

**Box 6.3: Client's views of good medical attention (in their own words)**

> *"They checked your blood pressure, they told you about different methods and the follow up. They are very caring".*
>
> *"If the equipment is not clean it may cause an inflammation."*
>
> *"Over there they insert IUD without any examination, but here they asked me to do some laboratory test, so that they can see if I could tolerate the IUD or not".*

**IV. Fourth theme: Effects of contraceptive on client health**

Clients are generally concerned about their health and the effects of contraceptive on their bodies. This seems to lead some clients to just give up using contraceptives altogether while others resort to the use of natural methods of family planning. Before discontinuation, a number of clients will switch between clinics and methods hoping to find a suitable contraceptive that gives them a tolerable kind of health problem. From the clients perspective adverse health effects encompasses: headache, irregular bleeding, heavy bleeding, mood change and nervousness. For providers these symptoms are defined as side effects which are accompanied with most contraceptive methods. While providers may not give attention to side effects because they are not seen as life threatening, clients mentioned that health problems resulting from contraceptive use can alter their daily lives, and is therefore a reason for discontinuation of their method.

These findings are in line with many literature which shows that contraceptive side effects can be a barrier to the adoption of a method or a reason for discontinuation (Cotton et al., 1992, Hardee et al., 1994, Huezo and Diaz, 1993, Lei et al., 1996, Ndhlovu, 1995).

In fact in the three successive demographic and health surveys conducted in Yemen for the years, 1991, 1997 and 2003, women mentioned that fear of side effects as a reason for not intending to use contraceptive (CSO and MI, 1993, CSO and MI, 1998, MOPH&P et al., 2004).

**Box 6.4: Client's views of the effect of contraceptive on their health (in their own words)**

> *"I had an IUD inserted two years ago. As a consequence, I had long lasting period, some times more than ten days so I removed it and I tried the pills for 4 months. The pills caused me headache and I become nervous, shouting on my child, I stop it for one month before I got pregnant with my second child".*
>
> *"I tried once the pills and they made me nervous, I had a headache, I stopped using them. I tried withdrawal for one year I got pregnant. Afterwards I insert an IUD and it was okay".*

## V. Fifth theme: Social and cultural barrier

Where the status of women is low, social and cultural barriers to accessing family planning methods can be more formidable than financial costs (Phillips JF et al., 1996)

The analysis of the transcript from the in-depth interview gives a wealth of information in these issues. Client's perception of quality of care was not limited to what they get in the encounters. The restrictions they face is based on their cultural context, manifested itself through providers' biases, the obligation to obey their husbands as a part of cultural norms, gender disparities, and power imbalances between men and women shapes their view about what quality services means to them.

### a) Provider bias

Service providers may sometimes deny clients access to a family planning method as a result of their own prejudices about the method. Analysis of the in-depth interview transcripts points out the issue of provider bias towards some contraceptive methods, a practice which disappoints and frustrates clients who demand a certain method. This includes, restriction on IUD insertion based on clients age and parity; unwillingness of some providers to insert IUD during the postpartum period (35-40 days after childbirth); discourages clients from seeking sterilization method and the lack of sympathy and judgmental attitude

towards clients who seek abortion services even if the pregnancy is a result of contraceptive failure.

In fact provider's restriction of contraceptive based on client characteristics of minimum and maximum age, number of children and limiting method choice based on their own strong negative believes or attitudes toward particular methods were reported through staff interviews in the 1999 Yemen situation analysis study. For example, almost one quarter of Yemeni providers interviewed acknowledged that they would never recommend female sterilization (tubal ligation) under any circumstances(MOPH et al., 1999).

**Box 6.5: Client's views of provider bias and attitude toward abortion (in their own words)**

*"It is 13 years since I got married. Whenever I went for pregnancy test the test was positive. When I delivered my last baby at a government hospital I decided to do sterilization. My husband agrees and he was ready to sign by his ten fingers, but unfortunately the doctor did not agree, she told me I am still young. My husband will divorce me if I got pregnant".*

*"The last time I got pregnant while I was breastfeeding my child. They told me that I have to wait till I get my period in order to insert the IUD. Unfortunately I got pregnant; that is way I came immediately after 35 days of delivery to insert an IUD".*

A client came seeking a contraceptive method before she found out that she was already pregnant. Here is the conversation which took place between her and the nurse:

Client: *Can you do anything for me to get red of this pregnancy?*
Nurse: *Don't you know that this is against religion " Haram"?*
Client: *Yes I know*
Nurse: *So how dare you ask for it since you know? Any way we don't do abortion in this clinic.*
Client: *Do you know any place were I can do it?*
Nurse: *Go to the outpatient obstetric/Gynaecological clinic and ask there..*

**Obedience to husband and covert use:**

The findings on obedience to husband and covert use of method suggest that women may sacrifice their own wishes for those of their husbands - or their

perceptions of their husband's wishes, but even this has its limits, if the compromise goes beyond the threshold of endurance for the women. The analysis of the transcripts from the in-depth interviews shows that the obedience to husband may have forced some women to accept a particular method and tolerate their side effects in order to obey their husbands, especially since husbands' obedience is a part of the cultural norms. However, other women may overcome these cultural norms by using contraceptives without the knowledge of their husbands (covert use).

The common definition of "covert use" in the literature is contraceptive use without the knowledge of the spouse. Covert use may have several implications for programmes in terms of the side effects of method use, method choice, and maintaining standards of confidentiality and privacy. Secret use has been linked to the predominant use of specific contraceptive methods that can be hidden easily from the husband, such as the pill or the injectable (Biddlecom and Fapohunda, 1998).

It is worth mentioning that the issue of covert use emerged in the analysis of the transcript from the in-depth interview. In the exit interview almost all women said that the husband knew that they would be using contraception. The reason is most probably because women in the clinical setting will not admit to such practice for fear of being denied the services. In fact a high proportion of Yemeni providers indicated in the staff interview in the 1999 Yemen SAS that they restrict the availability of contraceptive methods based on husband consent (MOPH et al., 1999).

**Box 6.6: Client's views of cultural barriers to quality care (in their own words)**

**Obedience to the husband**:

The nurse advised the client who has an inflammation to take a medication. *"But you have to avoid physical contact with your husband for 5 days"*. The clients kept quiet for a while and looked at the nurse. The nurse repeated what she said because she thought that the client did not understand.
The client commented: *"How can I be away from my husband for 5 days, what about husband obedience"!*

A client came to health centre to remove her IUD. She wants to keep the IUD in but her husband asks her to remove it because he wants more children. She said:

*"My woman friend told me you have to fulfil your husband wisher, you should obey him, and otherwise it is against God wishes to do that it is "Haram". Otherwise I was planning to live it in for longer period. "What can I do? I don't have any choice."*

**Covert use**:

*"My husband has no a regular source of income, my children are suffering, they move about aimlessly, no food, no cloth and start begging from the street. At the main time he doesn't want me to use any method. So I have no choice but just start a pill secretly."*

**IV. Sixth theme: Gender role:** gender disparities and power imbalance between men and women

Clients frustrations and disappointments from the restrictions imposed upon them from their husband in using the appropriate and preferable contraceptive method were apparent. The perception that husband may not accept the use of condom was identified from the analysis of the interview transcripts, a finding which was consistent with other studies (Kulczycki, 2004).The husband also may hinder their spouses access to services by controlling women's mobility. The in-depth interview revealed interesting findings regarding the restrictions based on method choice and on gender role.
Gender inequality, as an element of social context of reproductive health, were the subject of many studies reported in the literature. For example, many studies demonstrate the influence of men's preferences and power on reproductive outcomes such as contraceptive use and childbearing (Bankole, 1995).Other studies demonstrate the disagreement between couples about the desirability of pregnancy and use of contraceptive (Bankole Akinrinola and Singh, 1998, Becker, 1999, Speizer IS, 1999). In the case of Yemen, recent survey findings revealed that in only 6 percent of the cases the wife had the right to decide by

her self whether to use contraceptive or not, while in more than 53 percent of the cases the husband took the decision alone, and in 29 percent of the cases the couples took joint decision (MOPH&P et al., 2004).

**Box 6.7: Client's views of gender role as a barriers to quality care (in their own words)**

**Hindering the access and limited choice of method:**

*"When I decided to use contraceptive I asked my Husband to take me to the health centre. He kept telling me every day we will be going the next day and then postponing it. When I noticed that I got pregnant I had a shock .My husband brought me tablets from the pharmacy, which was supposed to help me get rid of the pregnancy? I took the tablets and felt some pain but unfortunately nothing happened. I am still pregnant. Today I came to this centre to see if the doctor can help me. I know this is against religion, and God will banish me, but what can I do. I have already 4 children; I can not afford to have any more."*

*"I have used pills; it caused me headache, and irregular vision and fatigue. When I stopped using them my vision became normal. The doctor told me that I cannot use an IUD and advised me to use suppositories and condom. My husband will never agree to use a condom he is not cooperative at all. For sure I didn't want to get pregnant one way or another. I will try the pills for the second time since I don't have any choice, hoping it will not cause me any problem this time".*

A nurse with 14 years of experience in providing family planning services said: "the *husbands do not like the condoms. They are not convinced in their use. Most of the clients return back the condom, which we distributed to them because their husbands do not like them. Every thing is according to the husbands wishes, the opinion of the wife is not important"*

Analysis of the data from service statistics, allowed the researcher to quantitatively test the hypothesis that emerged from the qualitative findings,

considering the gender role on limiting method choice. Gender power structure at the spousal level is indexed by their differences in education levels.

Reported use of condom was significantly higher for couples in which the wife had at least secondary education and the husband attended above secondary education. With increased age, parity, and educational attainment, women are, to some degree, better able to negotiate condom use. Controlling these variable condom uses were assessed using a logistic regression model. Odds ratio of condom use were found to be elevated among women who had secondary or higher education (odds ratio, 3.0) as did, although to lesser extent, those married to men with above secondary level of education (odds ratio, 1.04).

The results indicate that highly educated women and women married to men with higher education level were predictor of condom use. One study in South Africa gave a similar result, where odds ratio of consistent or occasional condom use were elevated among women who had secondary or higher education (odds ratio, 4.4), as well as among urban women (odds ratio, 3.2) and those married to men with higher education levels (odds ratio, 3.8) (Maharaj and Cleland, 2005). In a qualitative study about socio-cultural context of condom use in Lebanon, the author concludes, with increased age, parity, and educational attainment, women are, to some degree, better able to negotiate condom use (Kulczycki, 2004).

In summary many of the views and perceptions of quality of care which were explored by the clients interviewed in this study are related to the element of quality in the Bruce-framework. Clients perception of quality of care is coincided with four out of the six elements (interpersonal relation, information giving, choice of method and technical competence). Issues relating to the element on "constellation of services" were not emerging as a theme, although it was hardly mentioned by few clients, this also applies for the element on "follow–up/continuity of services". Clients tend to focus upon the process of services of care, as well to the outcome of the services, rather than the organizational structure or policy. Clients also focus on the socio-cultural factors which hinder their access to quality services as they perceive it.

### 6.2.3 Interpretation of findings related to Objective Four

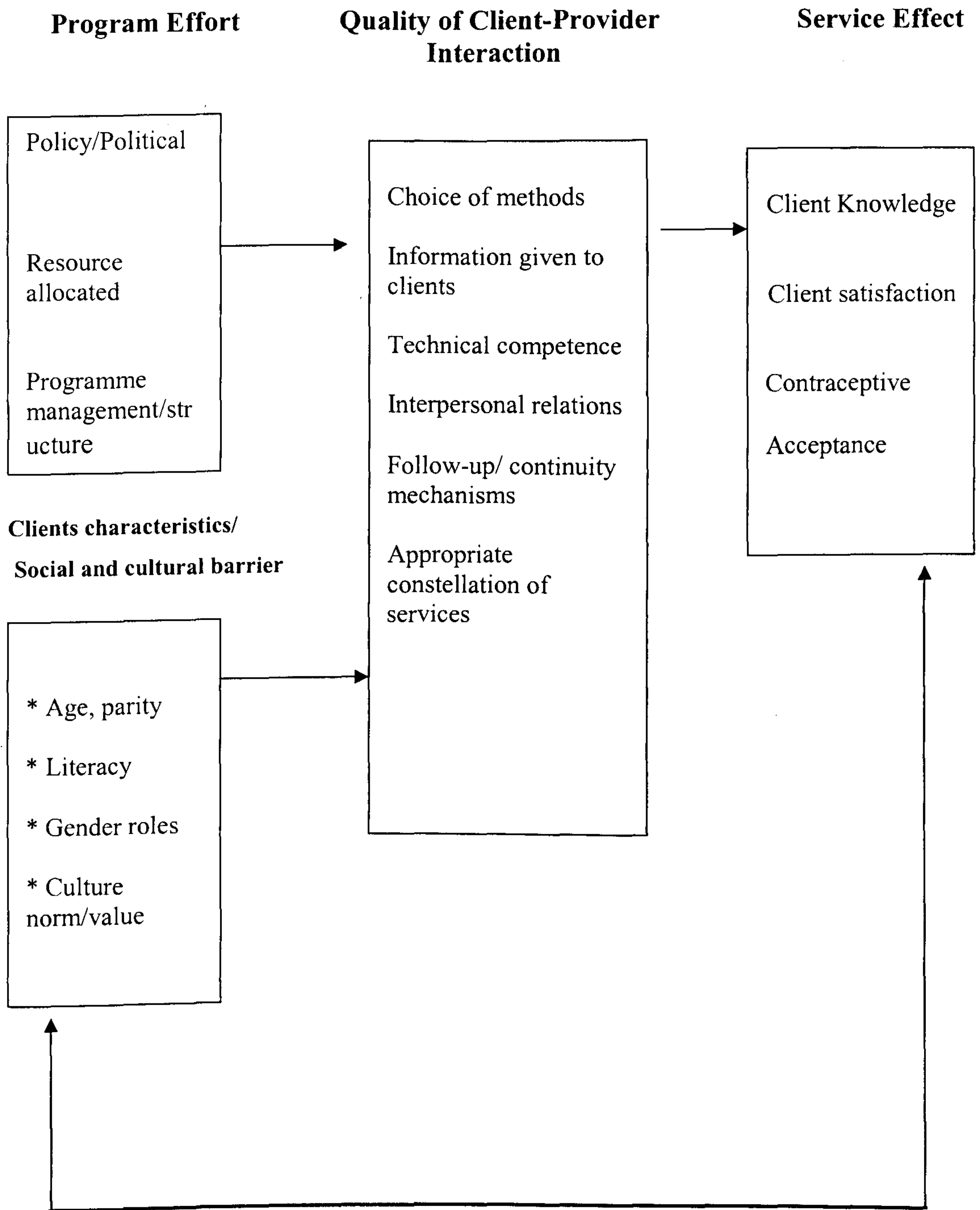
**Objective Four:** To further develop the Bruce framework for the assessment of quality of care of family planning services.

The Bruce analytical framework links the element of quality to programme effort (in terms of policy, resources, and management) on one hand and to its client-level output (in terms of client knowledge, satisfaction, acceptance, and continuation) on the other.

Bruce pointed out that the client does not usually see the apparatus behind her experience; all the vital work required in providing services. Thus, the policies, resource allocation, decisions, and management tasks that precede the delivery of services are not directly experienced, but their outcome, the service–giving, is. (Bruce, 1990).

Based on the findings of the current study, it can be argued that clients tended to focus upon the process of care, and to some extent on the intended outcomes of care when explaining their care rather than the organizational structure and policy. However to them the determinant of quality lies in their cultural reality, and they tend to focus on issues that hinder their access to quality care. Two cultural-related characteristics were identified from the study; provider bias and obedience to husband. Other important determinants elicited were related to power imbalances between husband and wife, which reflect gender disparities. Thus the three vantage points from which clients view quality are; (the social and cultural barrier), the service-giving process itself and the outcome of care, particularly with respect to individual knowledge, behaviour, and satisfaction with services. Figure 6.1 display a modified version of the Bruce-framework.

**Figure 6.1: The modified framework**



### 6.2.4 Interpretation of findings related to Objective Five

**Objective** Five: To measure the utilization of services, in relation to the type of service delivery points (governmental and non-governmental organizations).

The under-utilization of the governmental SDPs was obvious compared to their NGO counterparts. The service statistical data revealed that, on average, ten new clients attended the NGO per day compared to only 3 clients in the governmental hospital and just one client for the governmental health centre.

The analysis of the study revealed a clear pattern of clinic use in that only a few service-delivery points provide contraceptive services to the majority of new family planning acceptors. Almost 64% of new acceptors are served by only one quartile of the SDPs and the remaining three quartile served 21%, 12% and 3% of the total client load respectively. A similar result was shown from a study useing data from Zimbabwe, Nigeria, and Tanzania which demonstrated that 20-30 percent of all clinic deliver services to 70-80 percent of all clients attending clinics (Mensch et al., 1994).

The exit interview data suggests that clinics, as identified by clients, offer a better or wider range of services that are most heavily used. Ninety-two percent of family planning clients with other SDPs near to their homes preferred the NGO. In the case of the governmental SDPs, approximately sixty percent of their clients bypass the nearest SDP and choose to go to their preferred SDP. Clients are concerned about the quality of services provided when they choose their SDP. Almost 82 percent of the clients preferred the non-governmental SDP for perceived quality, and the most important item recommended by friends constituted 51 percent of this reason. Approximately 18 percent of the client's preference of the NGO SDP was due to factors relating to accessibility, acceptability and affordability of services

In the case of governmental clients, 29% of respondents choose their SDP based on their perceived quality of services. However, the majority of respondents'

choice depended on factors relating to accessibility, acceptability and, most importantly, affordability of the governmental SDPs compared to other nearby services. This finding is in agreement with different studies conducted in Egypt, Nigeria, and Kenya (Audo et al., 2005, El-Zanaty, 1998, Mensch et al., 1994).

## 6.3 SUMMARY OF KEY FINDING OF THE DISCUSSION

This study has addressed the quality of family planning services from the client perspective according to the Bruce framework for assessment of quality of family planning services which is based on the three Donabedian components of the health care quality; structure, process, and outcome. It is innovative in its attempt to incorporate the views of clients and explores how their perceptions coincide or differed from what the researcher claimed to be so.

The Bruce analytical framework links the element of quality to programme effort (in terms of policy, resources, and management) on the one hand, and to its client-level outputs (in terms of client knowledge, satisfaction, acceptance, and continuation) on the other hand. Based on the findings of the current study, it can be argued that clients tend to focus upon the processes of services, as well as the outcome of the services, rather than on the organizational structure or policy. For clients the determinant of quality lies in their cultural reality, and they tend to focus on issues that hinder their access to quality care. Two cultural-related characteristics were identified from the study; provider bias and obedience to husband. Other important determinants elucidated were related to power imbalance between husband and wife, which reflect disparities. The three vantage points from which clients view quality are; the social and cultural barriers, the service–given process itself and the outcome of care, particularly with respect to individual knowledge and satisfaction with services.

Quality is a broad concept that no single approach can adequately and fully measure. Alone, any single approach can only address a piece of the total quality picture. This research is guided by a mixed-method paradigm with quantitative and qualitative methods providing complementary perspectives on the complex issues of assessing quality of care, in order to obtain the most

accurate and realistic picture for quality of service. Qualitative and quantitative data were analyzed separately but then complemented each other. In applying a multiple-method approach, it enabled a process of triangulation in the final analysis phases, where the findings from more than one source of data were compared, thus, increasing the concept of trustworthiness in the research process.

The observation of client-provider interactions provided most of the information with regards to how a client is counseled, examined, and provided with a contraceptive method. Exit interviews revealed how well the information were received or understood and provided quantifiable data on client's perception. The in-depth interviewing helped to elicit the interviewee's perspective on quality of care, rather than that imposed upon by the researcher, it also represented a useful alternative for encouraging people to air sensitive issues, even in extremely closed cultures where the subject of family planning/STDs is considered taboo. The exit interview data suggests that clinics, as identified by clients, offer a better or wider range of services that are most heavily used it also reveals that clients are concerned about the quality of services provided when they choose their SDPs.

The analysis of the service statistical data revealed a clear pattern of clinic use in that only a few service-delivery points provide contraceptive services to the majority of new family planning acceptors. The under-utilization of the governmental SDPs was obvious compared to their NGO counterparts.

Several important issues emerged from the analysis of the in-depth interview, complemented with secondary data such as the barriers which are imposed by individual service providers based on their own strong negative beliefs or attitudes towards a particular contraceptive method. Power disparities between spouses can affect the method choice, an issue which is not taken into consideration in service delivery. Clients "social context" were not discussed during provider-client interactions, consequently providers fail to recognize that gender norms and power relations may inhibit the women's access to services and limited their choices

The analysis of the transcripts from the in-depth interviews gives a wealth of information in clients "social context" which might affect the quality of care received. The study findings suggest that women lack autonomy in decision-making and in expressing their right to practice contraceptive. The restrictions imposed on them in using the appropriate and preferable contraceptive method, either from their husband or as result of cultural norms and practice, are apparent. The obedience of husband as a cultural norm may force some women to accept certain methods and tolerate their side effects in order to obey their husbands, however, other women may overcome these cultural norms by using contraceptives without the knowledge of their husbands (covert use), which restricts their choice of method to those methods which can be hidden from the husband. It is worth mentioning that the issue of covert use in this study emerged in analyses of the transcripts from the in-depth interviews. In the exit interview almost all women said that the husband knows that they will be using contraception. The reason for this is that most probably women in the clinical setting will not admit to such practice because of the fear of being denied the services.

The study revealed several shortcomings in various elements of quality provided by service delivery points through governmental and non governmental organisation SDPs. Clients reported that there is a need for privacy and most of the time this is not considered in both sectors, although the NGO gives relatively more attention to these aspects. Privacy during a medical examination was violated by the presence of students who came from the training institute or medical schools and who attended the examination most of the time without asking consent from the client. The majority of the clients consultation sessions were conducted in the presence of other clients.

Several strengths are evident in the quality of services given to clients with respect to the technical competence element of quality within the NGO compared to their Governmental counterparts, In the NGOP SDP providers handle IUD with aseptic procedures in all the cases observed, while in the governmental SDPs only 60 percent restrict to such practice. Clients in the NGP were more likely to be examined using sterile gloves compared to their

Governmental counterparts. the significantly higher proportion of governmental clients who stop using contraceptive due to side effects, in comparison to their NGO counterparts raise a concern, and a need further study.

The most serious limitation to the quality of care provided is the lack of information exchanged during counselling. For example, the providers (in both sectors) often failed to enquire about the reproductive intention of their clients. Moreover, the proportion of new clients who were informed about possible side effects ranges from 80 percent for the NGO clients to only 30 percent for their governmental counterparts. The inadequate information about side effects delivered to clients suggests a possible origin for the problems of discontinuation and of negative attitudes towards a method when clients experience side effects. Provider's omission or oversight to inform clients that they can switch if they were not satisfied with their current method could undermine the client's continued use of contraceptive method.

The integrated approach to reproductive health services, most notably by integrating STD/HIV/AIDS management and prevention into family planning services, is limited. Condoms are mentioned to less than one quarter of the clients in both sectors and this is almost always done in the context of contraceptive only. Waiting time is also considered an important factor affecting the acceptability of family planning services. Clients approaching the NGO complained of long waiting times while by comparison, clients of the governmental SDPs experience a shorter waiting time.

**In summary**, the above chapter has presented a discussion of the results as reported in the previous chapter. The substantive results from the study suggest that the quality of care being provided could be improved. The overall weakness of the programme revolves mainly around family planning counseling, asepsis and STD/HIV integration. The most important aspect, however, lies in the poor interpersonal relations aspect of care, as client needs for privacy are not being taken into consideration in addition to their social context.

Without a thorough understanding of women's perceptions of family planning in specific contexts, one can run the risk of incorrectly homogenizing and universalizing women and their needs, which would weaken the effectiveness of family planning programmes. The following chapter will present the conclusions and a set of recommendations aimed at improving the quality of family planning services in Yemen, including areas for further research as well as policy implications..

# Chapter Seven

# Conclusions and Recommendations

## 7. INTRODUCTION

This chapter presents an overall conclusion of the research findings regarding the quality of family planning services. The conclusions are presented according to the study objectives. Based on the conclusions, interventions to improve the quality of care are recommended, and suggestions for further research as well as policy implications are also indicated.

### 7.1 OVERALL CONCLUSION

In relation to the overall aim, a comprehensive assessment of quality of care of family planning services in governmental and non – governmental organizations in Sana'a city (Yemen) was made. Quality is a broad concept that no single approach can adequately and fully measure. Alone, any single approach can only address a piece of the total quality picture. The muti-method approach adopted in this study (qualitative and quantitative methods), were complementary to each other and they provided very useful and comprehensive information about the quality of care of family planning services. Several strengths are evident in the quality of services given to clients within the NGO compared to their Governmental counterparts. However, the substantive results from the study suggest that the quality of care being provided by both sectors could be improved.

The comprehensive approach applied in this study was developed for research purposes. However, there is a need to further simplify the method for routine monitoring in a quality assurance system. Modification of the method should include a reduction of the data collected to include the most important and sensitive indicators of quality.

## 7.2 Conclusions related to study objectives

### 7.2.1 Conclusions related to objectives 1 and 2

**Objective one**: To measure the quality of family planning services provided by service delivery points in Sana'a city, according to the six elements of quality in the Bruce-framework:

i) Choice of methods
ii) Information given to clients
iii) Technical competence
iv) Interpersonal relations
v) Follow-up and continuity mechanisms.
vi) Appropriate constellation of services.

**Objective two**: To identify whether there are variations in the level of quality of care related to the type of service delivery points (governmental and non-governmental organization), according to the six elements of quality in the Bruce- framework.

According to the six elements of quality mentioned above, the quality of care of family planning services is assessed by employing direct observation of client provider interaction and exit interview with clients. Data analysis resulted in the identification of the following areas of concern on each of the six elements of quality:

**Choice of methods**: Clients in both sectors (Gov and NGO) are informed about a reasonable range of methods but with less of an emphasis on barrier methods such as (condom, spermicidal and diaphragm). The majority of clients in both sectors already had a preference for a particular method and they are provided with their preferred methods. However, a major concern is that a significantly higher proportion of revisit clients approaching the government SDP stop using their method as a result of side effects, compared to their NGO counterparts.

**Information exchange:** The most serious limitation to the quality of care provided is the lack of information exchanged during counselling. For example, the providers (in both sectors) often failed to enquire about reproductive intention of their clients.

Not only do providers not obtain full information on clients' individual situations, but also they frequently do not provide all the information the client needs. Providers gave incomplete information on how to use the method (less than 60 percent of clients in both sectors know the correct action if the miss one pill).This low level of client knowledge about their chosen method suggests a communication problem.

Moreover, the results were less encouraging on such important dimensions as possible side effects of different methods and how to manage side effects, including the possibility of switching method if desired. Eighty percent of NGO acceptors were informed by the service provider that they might experience side effects with their methods. The comparable figure for the governmental SDP visited is only 30 percent. According to the observers not many clients are told that they can switch method if they are not satisfied with the method. The results range from only 15% in governmental SDPs to 60 percent in the NGO SDP. This pattern suggests a possible origin for the problems of discontinuation and of a negative attitude towards a method when clients experience side effects.

In the positive side, a high proportion of client-provider interaction includes discussion of client's breastfeeding status and consequently hormonal methods are mostly targeted to the appropriate users. This applied for both sectors (Gov and NGO).

**Technical competence:** The technical competence of providers appears to be reasonably good with regards to certain specific tasks, such as (assessing client's weight and measuring their blood pressure). However, the major negative aspects are the irregular use of sterile gloves during pelvic examinations and following asepsis procedures during insertion of IUD as

well as STD screening. Introductory questions on possible symptoms, is also not being carried out consistently

Several strengths are evident in the quality of services given to clients in respect to this element of quality within the NGO compared to their Gov counterparts. For example, in the NGO SDP providers handle IUD with aseptic procedures in all the cases observed, while in the governmental SDPs only 60 present restrict to such practice. Clients in NGO are four times more likely to be examined using sterile gloves comparing to their Gov counterparts.

**Interpersonal relationship:** Findings revealed that providers were insensitive to their client's need for privacy. Clients did not have any opportunity to ask questions and they were denied the right to be informed of the medical procedure in advance.

A high proportion of clients in both sectors reported that they were not given any opportunity to express their concerns by asking questions and were not informed about medical examination or procedures they should undergo beforehand. On the positive side, however, the providers do inform a high percentage of the clients about the results of their medical examination.

**Follow –up and continuity mechanisms:**

The most basic mechanisms to encourage continuity of use and follow-up were found to be generally in place, although the NGO providers seem to be more advanced in this respect compared to their governmental counterparts. Almost three-quarters of the NGO clients were asked to come back for follow-up, compared to less than fifty percent of their governmental counterparts. However, it can be argued that giving the follow up data does not guarantee that the client would be able to visit the clinic as scheduled as women may face cultural obstacles, which restricted their mobility, this was illustrated from the findings of the in-depth interview with clients.

**Appropriate constellation of services:** The integrated approach to reproductive health services, most notably by integrating STD/HIV/AIDS management and prevention into family planning services, is limited. Condoms are mentioned to less than one quarter of the clients in both sectors and this is almost always done in the context of contraceptive only.

Waiting time is also considered an important factor affecting the acceptability of family planning services. Clients approaching the NGO complained of long waiting times, almost more than three quarters of them have to wait for an average of an hour before they get the services and by comparison, clients of the governmental SDPs experience a shorter waiting time.

As an approximation of the physical accessibility to the SDPs, clients were asked about the means of transportation they use to access the clinic. It was clear that most of the clients who approach the government SDPs walk to the SDP and live mainly within a short distance from the SDP, although some of them took a different type of transportation. For the NGO clinic, few of their clients live within walking distance, and most of the clients came from far distances using different types of transportation, either public or private transport. Given the fact that clients in this setting are not restricted by a defined catchments area, this suggests that people try to reach the preferred clinic regardless of how far it is and whatever it might cost them.

### 7.2.2 Conclusions related to objectives 3

**Objective three**: To study the perception of clients for the quality of care of family planning services.

This study clarifies what quality of care means to clients and it helps to describe the quality of service received from a clients point of view. At the same time it provides an opportunity to examine whether the key dimension of quality as identified by experts' perceived and defined differently by clients.

For most of the clients who responded to the in-depth interview, quality means the way of treatment they encountered. For clients perceive good treatment as involving staff attitudes, staff technical competence and communication skills as prerequisites for good treatment. Themes that emerged from the analysis of the in-depth interview transcript includes: good treatment, privacy during examination and consultation, good medical attention, effect of contraceptive on client health, social and cultural barriers (provider bias, obedience to husband and covert use of contraceptive), gender role (gender disparities and power imbalance between clients and their spouses). Several important issues emerges from this finding such as the barriers which are imposed by individual service providers based on their own strong negative beliefs or attitudes towards a particular contraceptive method, as neither government policy endorsement nor valid medical justification, serves to restrict access and limit the choice of method for clients.

Power disparities between spouses can affect the method choice, an issue which is not taken into consideration in service delivery. Clients "social context" are not discussed during provider-client interactions, consequently providers fail to recognize that gender norms and power relations may inhibit the women's access to services and limited their choices. Examination of spouse influence on each other and the use of a particular method shows that husbands have a greater control over the couple's reproductive decision-making, especially if the husband is educated than the wife. However, it seems that an educated wife can guarantee to achieve her desired family size, the choice of method, and in using contraceptive in general.

In conclusion, without a thorough understanding of women's perceptions of family planning in specific contexts, there is a risk of incorrectly homogenizing and universalising women and their needs, which would weaken the effectiveness of family planning programmes.

### 7.2.3 Conclusions related to objectives 4

**Objective 4**: To further develop the Bruce-framework for the assessment of quality of care of family planning services.

The Bruce analytical framework links the element of quality to programme effort (in terms of policy, resources, and management) on one hand and to its client-level output (in terms of client knowledge, satisfaction, acceptance, and continuation) on the other hand.

Based on the findings of the current study, it can be concluded that, in general, clients tend to focus upon the process of services of care, as well as on the outcome of the services rather than on the organizational structure or policy. Clients also focus on the socio-cultural barriers, which hinder their access to quality services and in complying with the provider's recommendations. The three vantage points from which clients view quality are the social and cultural barriers, the service-giving process itself, and the outcome of the care, particularly with respect to individual knowledge and satisfaction with the services.

### 7.2.4 Conclusions related to objectives 5

**Objective 5:** To measure the utilization of services, in relation to the type of service delivery points (governmental and non-governmental organizations).

The analysis of service statistical data revealed a clear pattern of clinic use in that only a few service-delivery points provided contraceptive services to the majority of new family planning acceptors. Almost 64% of new acceptors are served by only one quartile of the SDPs. The exit interview data suggests that clinics, as identified by clients, offer better services that are more heavily used. Ninety-two percent of clients with other SDPs near to their homes preferred the NGO SDP. In the case of the governmental SDPs, approximately sixty percent of their clients bypass the nearest SDP and choose to go to their preferred SDP. Clients are concerned about the quality of services provided when they choose their SDP. Almost 82 percent

of the clients prefer the non-governmental SDP for perceived quality, and the most important item recommended by friends constituted 51 percent of this reason. Approximately 18 percent of the client's preference of the NGO SDP is due to factors relating to accessibility, acceptability and affordability of services. In the case of governmental clients, 29% of respondents choose their SDP based on their perceived quality of services. However, the majority of respondents' choice depended on factors relating to accessibility, acceptability and, most importantly, affordability of the governmental SDPs compared to other nearby services.

## 7.3 Recommendations and future research

### 7.3.1 Recommendations

A large number of recommendations resulted in response to the myriad of problems that were revealed by the study. Clearly there is substantial room for developing and evaluating new and creative approaches to improving national family planning services in Yemen. Overall, therefore, the following recommendations are offered to programme managers, providers, and donors who are interested in improving service quality in Yemen.

**Use existing resources more efficiently**

Some problems of service quality are not as the result of lack of resources, but these can be alleviated through a more efficient use of existing resources. Examples include; taking the time to discuss clients' context, particularly at SDPs where each provider sees a few clients per day. Condoms are widely available, but they need to be recommended for the protection against both unwanted pregnancy and the dangers of STIs/ HIV/AIDS.

**Improve providers technical and communication skills**

Many of the observed strengths and weaknesses depend on the actions of the staff. Who are charged with the actual provision of family planning

services? In turn, it is the responsibility of family planning programmes to train providers adequately so their actions will result in high-quality care. The following suggestions are possible areas for training;

- Training of staff on quality assurance, which is important to create the necessary quality culture.
- Training of staff in communication skills is of great importance and this will improve feedback to clients.
- Training to improve technical competence in infection prevention control, especially among providers of governmental SDPs which are more likely to diminish the problem of cross infection.
- Improve provider interaction skills by provision of training in interpersonal skills, learning to listen and encouraging clients to ask questions and voice their concerns should be essential elements for provider's in-service training programmes.
- Provider should be trained to recognize that gender norms and power relations may inhibit women's access to health care and to sensitise providers on how they can contribute to informed decision-making by clients and how to respect the client's autonomy and bodily integrity.
- Training programmes should encourage providers to promote condom in a positive manner, thereby breaking prejudices against this method of contraceptive.
- Creating a culture of quality in the health care profession, including concept and method of quality of care in the curriculum of medical and nursing schools.

**Bridging the gap between protocols and provider behaviors:**

The development of improved service protocols is critically important to improving services, but it may not immediately lead to change in provider behaviors. Pre-service and in-service training and supervision visits should place a greater emphasis on compliance with the Yemeni

National Family Planning programme service guidelines and standards, so that any unnecessary restrictions by providers on contraceptive use might be reduced and ultimately eliminated.

**Involve men in family planning:**

In a traditional society like that of Yemen, it is the man of the household who makes the decisions regarding family planning. At the same time, women remain the focal point of the national and NGO programmes, and such programmes systematically exclude men. To reverse this situation, family planning should be made more accessible to men, and they should be encouraged to play a more active and responsible role in family planning. Men should at least be informed about condom use and its benefits in preventing STD transmission as well as preventing pregnancy.

**Respond to clients need:**

Furthermore, some recommendations are made which would help decision makers and staff within each centre to improve the quality of service delivery. These recommendations include the following:

More effort is needed for providers of governmental SDPs to their clients need for information about common side effects and how to deal with or cope with them. Providers should invite clients to return to the SDP if they cannot tolerate the side effects, and clients should be reassured that they can change their method if dissatisfied.

Family planning service providers are recommended to work with women's advocates to establish a peer network in which experienced users could counsel new users about the potential side effects and provide practical strategies for coping with them.

Service providers in the NGO service delivery point should undertake more effort in order to shorten the waiting time for provision of services to their clients.

Providers in both sectors, especially in governmental SDPs, should show respectful treatment to all clients irrespective of their background. The privacy of clients during their examination and consultation should be ensured. By no means, other persons who are not involved in care given be present during examination (e.g. medical students), unless they obtain the consent of the client, and client preference for privacy should be respected in this case.

Concern must be shown for those OC users who are not given enough information about the use of the pills by their providers, and who consequently uses them incorrectly. This effort is largely wasted by providing OCs to more acceptors, if those acceptors are not properly informed and counselled about how to use this method effectively. This applies for both sectors (Gov and NGO).

Back-up for failure of contraceptive method should be provides based on the guidelines (the Yemen Family Planning guidelines actually includes the emergency contraceptive method). This issue should not be left to individual providers who have a judgmental and negative attitude.

### 7.3.2 Future research:

**Conduct operational research to test for interventions on quality:** To better understand how programme goals can be reached, OR studies are needed to test whether interventions are effective, and how they can be scaled up to nation-wide improvements in service delivery. Potential productive areas for OR include delivery of effective training to accomplish behavioural and attitudinal change, coordinate of training and supervisory efforts to strengthen providers' counselling skills on family planning and the prevention of STI/HIV/AIDS, and as a means of making better use of existing resources.

**Conduct research to improve understanding** of factors supporting the present patterns of services delivery, as well as provider's perspectives on quality. Further explanation may be required for providers who appear reluctant to engage in certain types of intimate discussion with clients.

Perspectives on quality - that better integrate both the client and provider perspectives - need continuing investigation.

**Research on the perception of quality for non-users**: The approach in this study revolves around a family planning facility; information is needed on non-clients' perceptions of facility quality, which may be an important determinant of their failure to practice contraception.

Since gender disparities and power imbalance between spouses has emerged as an important predictor of family planning use and choice of methods for clients it is recommended that future **research include** a broader definition of gender disparities and power imbalance between spouses as one of the determinants of quality of care at the client level.

Empirical data is needed in order to understand the male perspectives and the extent of their own involvement in family planning issues. An understanding of how men relate to women regarding family planning health issues is needed, how decisions are made in this domain, and what are the cultural and societal factors, which hinder clients from getting quality services.

### 7.3.3 Policy implication:

Quality should be promoted with a dual rationale stating that attention to quality makes services more responsive to the needs of clients and consequently, the attention to attract quality and retain a greater clientele.

In some cases, an entrenched programme subculture can limit clients' choices to only one or two favoured methods, leaving un-served the

persons for whom these methods do not work. Clearly, **public policy** needs to address not only the variety to contraceptive methods that are present in the environment, but also the many barriers that impede their use.

Clinical staff needs to hear from the institutions that employ them that they are there to serve all women equitably. This concept probably cannot be communicated through a single training course, butt can be embedded in broader institutional policies, management systems, norms and incentives.

Even though men are often the chief decision-makers, the services approach women only, and men need to be part of the services and they also need to be counselled, as counselling that would enable them to make informed choices and even help their wives make informed choices about contraceptive use.

In order to serve women and men better, providers should consider ways to make programmes more "**gender-sensitive**" – to consider how roles prescribed by society affect men and women differently in terms of health needs, access to information and access to services.

Policy makers and programme managers should ways to make family planning services more client-centred as client-centred services not only meet technical standards of quality, but they also satisfy clients' desire for method choice, respectful and friendly treatment, privacy and confidentiality, information and counselling, and convenient waiting times. Finding ways to enhance client satisfaction, increase providers skills and expertise, and overcome barriers to care are key elements to ensure that clients will continue to seek services to meet their reproductive health needs.

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Annex 2.1

**Indicators used for the assessment of elements of quality of care for family planning services. Developed by the EVALUATION project**

The sources of data for the following indicators are as follows:

(AR)= administrative (program) records, (CR) = client record review, (CS) = client survey, (EI) = exit interview with client, (FG) = focus group, (OB) = observation (client-provider interaction, clinical procedure, etc), (PS) = provider survey.

| | Element/indicator | Data Collection Approach(es) |
|---|---|---|
| | **Interpersonal Relations** | |
| 1 | Service providers are trained in interpersonal relations | AR, PS |
| 2 | Provider establishes rapport for assessing personal situation (family circumstances, nature of sexual relationships | OB, CS, EI, FG |
| 3 | Client reports feeling :<br>a. welcomed by staff<br>b.at ease asking questions<br>c. treated with respect/politeness by providers | CS, EI, FG |
| | **Choice of Method** | |
| 4 | Number of methods approved for use at the SDP | AR |
| 5 | Number/range of methods available at SDP | OB, AR |
| 6 | Provider offers all appropriate methods | OB, EI |
| 7 | Provider places no unnecessary restrictions on method choice | PS, AR |
| 8 | Client receives her/his method of choice | CS, EI |
| 9 | Provider refers client to an existing, accessible site for methods unavailable at SDP | PS, OB, EI |
| | **Information Given to clients** | |
| 10 | Provider demonstrated good counselling skills (e.g., providing information, electing information, answering questions) | OB, EI |
| 11 | Provider has checklist available on information to cover during counselling session | OB, PS |
| 12 | Provider gives accurate and unbiased overview of all methods | OB, EI |
| 13 | Provider gives accurate, relevant information on method accepted:<br>a. how to use<br>b. advantage and disadvantage<br>c. side effects<br>d. primary and secondary precautions<br>e. complications that require referral<br>f. resupply<br>g. other important information | OB |

| | | |
|---|---|---|
| 14 | Provider asks client to repeat key information on method chosen (how to use, side effects, what to do if they occur, etc.) | OB, CS, EI |
| 15 | Clint correctly explains method chosen :<br>a. how to use<br>b. possible side effects<br>c. what to do if side effects occur<br>d. when to return<br>e. where to return | CS, EI |
| 16 | Informational materials are available (printed, model, sample, etc.) | OB |
| 17 | Privacy is acceptable for:<br>a- counselling<br>b- exam ( if any) | OB, EI |
| 18 | Consent form is available and signed by client | OB, CR |
| | **Technical Competence** | |
| 19 | Written guidelines on FP practice are available at SDP | AR |
| 20 | Job descriptions exist for each position | AR |
| 21 | Formal mechanisms exist to review/screen potential service providers | AR |
| 22 | Education/training criteria exit for service tasks | AR |
| 23 | New staff are trained regarding institution's guidelines | AR, PS |
| 24 | Clinical providers have received training relevant to the job | AR, PS |
| 25 | All staff receive periodic refresher/in-service training | AR, PS |
| 26 | Basic items are present for delivering methods available at SDP.<br>a. sterilizing equipment<br>b. gloves<br>c. blood pressure<br>d. specula<br>e. adequate lighting<br>f.. water | OB, PS |
| 27 | Provider can accurately explain contraception<br>a. how to use<br>b.advantage and disadvantages<br>c. side effects (balanced presentation0<br>d. primary and secondary precautions<br>e .complications that require referral<br>f. resupply | PS |
| 28 | Provider demonstrates skill at clinical procedures (according to guidelines ) | OB |
| 29 | Provider demonstrate ability to recognize/identify contradictors (consistent with guidelines) | OB, PS |
| 30 | Provider avoid tests, examinations, and waiting period that are not medically Justified | OB, AR, PS |
| 31 | Provider follows infection control procedures (outlined in guidelines) | OB |
| 32 | All levels of service providers receive routine supervision:<br>a. regular<br>b.useful (e.g., providers knowledge and clinical skills monitored | AR, PS |
| 33 | SDP is capable of handling HIV, other STDs, and reproductive tract infections (RTIs):<br>a. identification<br>b. diagnosis<br>c. referral | AR , PS |

| | | |
|---|---|---|
| | d. prevention counselling<br>e. treatment and counselling | |
| 34 | Client receives an appropriate method:<br>a. medically appropriate<br>b. appropriate for sexual lifestyle (including risk of STDs and HIV) | OB, CR |
| | **Mechanism to Ensure Continuity** | |
| 35 | Provider encourages client to return as needed | OB, EI, CS, FG |
| 36 | Follow-up/return schedule is appropriate/reasonable | CS, CR |
| 37 | Client can obtain resupply easily<br>a. supply of all methods offered at SDP is adequate<br>b. system for resupply is reliable (prevent stock outs) | OB, CS, EI |
| 38 | Clients past-due for follow-up are identified | AR, CR |
| 39 | Clients past-due for follow up are contacted | AR, CR |
| 40 | Reasons for non-return are identified | CS, FG |
| | **Appropriateness and Acceptability of Services** | |
| 41 | Clients and non-users perceive that:<br>a- privacy/confidentiality for counseling is acceptable<br>b- privacy/confidentiality for exam is acceptable<br>c- waiting time is acceptable<br>d- time with provider is acceptable<br>e- hours/days are convenient<br>f. staff is acceptable in terms of gender, ethnic group, age | CS, EI, FG |
| 42 | Clients and non-users perceive facility to be adequate of:<br>a- waiting room<br>b- exam room<br>c- cleanliness/hygiene<br>d- water<br>e-toilet facilities<br>f.___________(others) | CS, EI, FG |

Source: (Bertrand et al., 1994), Appendix C. p. 209-214

**Annex 4:1: Human Development Indicators**

| Indicators | Total population | Sana'a/ Urban |
|---|---|---|
| Life expectancy at birth | 61.1 | 61.9 |
| Population with Access to:<br>Safe water (%)<br>Sanitation (%) | <br>36.0<br>35.2 | <br>82.0<br>98.0 |
| Adult Literacy Rate (15+) | 47.3 | 73.6 |
| Combined basic and secondary enrolment rate | 54.5 | 63.7 |
| Per capital GDP (rial) | 75,560 | 128,947 |
| Household with Electricity | 41.3 | 98.4 |
| Females (25+) with secondary or higher education (%) | 3.3 | 7.8 |

Source: Yemen Human Development Report 2000/2001 (MOP&D, 2002) P.123-152

**Annex 4:2: Health profile**

| Indicator for the year 2000 | Total population | Sana'a/ Urban |
|---|---|---|
| Number of physicians | 3,879 | 912 |
| Number of nurses | 9,419 | 976 |
| Number of beds | 9,103 | 1582 |
| Number of physician per 10,00 of population | 2.27 | 7.10 |
| Number of nurses per 10,00 of population | 5.52 | 7.60 |
| Number of hospital beds per 10,000 of population | 5.33 | 12.32 |

Source: Yemen Human Development Report 2000/2001 (MOP&D, 2002) P.123-152

**Annex 4:3: Demographic profile**

| Indicators | Total population | Sana'a/ Urban |
|---|---|---|
| Residence population (thousand) | 18,261,000 | 1,488,000 |
| Annual population growth (%) | 3.5 | 7.3 |
| Total fertility rate | 5.8 | 4.0 |
| Demographic dependency ratio | 316.8 | 74.5 |
| Population density (per Km2) | 39.7 | 3,912.0 |
| Urban population (%) | 26.3 | 100 |
| Urban population annual growth | 5.9 | 8.9 |
| Persons per habitat able room | 3.1 | 2.1 |

Source: Yemen Human Development Report 2000/2001 (MOP&D, 2002) P.123-152

**Annex 4.4**

Questionnaire number:________

## Observation Guide for Interaction Between Family Planning Clients and Service Providers

***Adapted from the Situation Analysis Approach to assessing Family Planning and Reproductive Health Services.(Miller et al., 1997) P. 51-57***

INSTRUCTIONS TO OBSERVER: Obtain the consent of both client and provider before proceeding to observe the interaction between them. Make sure that the provider knows that you are not there to evaluate her/him and that you are not an "expert" who can be consulted during the session. When observing, be as discreet as possible: try to sit so that you are behind the client but not directly in view of the provider, and make notes quickly. For each question, circle the response that most appropriately represents your observation of what happened during the interaction.

| Health facility visited (name): | ______________________________ |
|---|---|
| Health facility code: | __________ |
| Study client number: | __________ |
| Date of visit: | Day _______ Month_______ Year_____ |

| Name of observer: ______________________________________ |
|---|
| Signature of team leader: ____________________________________ |

| Type of health facility: | 1= Hospital<br>2= Health Center |
|---|---|
| Type of sector: | 1= Government<br>2= NGO |
| Main purpose of visit: | 1= New FP acceptors<br>2= Repeat visit (without problem)<br>3=Repeat visit (problem with visit) |

| | | New clients | Revisit clients |
|---|---|---|---|
| **Assessing the Client** | | | |
| 1 | Did the provider ask about or did the client spontaneously mention any of these subjects?<br><br>(Circle all that apply.) | 1<br><br>2<br>3<br>4<br>5<br><br>6<br><br>98 | Whether the client wanted more children in the future.<br>Age of youngest child.<br>Whether the client is breastfeeding<br>If client has any questions.<br>If client has concerns about her own health.<br>If client has concerns about using method.<br>None of these subjects. |
| 2 | Did any provider ask about or did the client spontaneously mention any of these subjects?<br><br>(Circle all that apply.) | 1<br>2<br>3<br>4<br>5<br>98 | Any medical/family history<br>Abnormal vaginal bleeding<br>Abnormal vaginal discharge<br>Genital itching<br>Lower abdominal pain<br>None of these subjects |
| 3 | During the consultation, did any provider take or perform any of these actions?<br><br>(Circle all that apply.) | 1<br>2<br>3<br>4<br><br>5<br><br>98 | Assess weight<br>Take BP<br>Perform/refer for pregnancy test<br>Perform/request /refer for a blood test<br>Perform/request/refer for a pap smear<br>None of these actions |

| | New clients | Revisit clients |
|---|---|---|
| **Discussion of Family Planning** | | |
| 4. Did the provider ask about or did the client spontaneously mention any previous method use? | 1= Yes<br>2= No | |
| 5. Before coming to the health facility, what contraceptive method was the client using? | | 1. Combined pill<br>2. Progestin only pill<br>3. IUD<br>4. Condom<br>5. Diaphragm<br>6. Spermicidal<br>7. Other |
| 6. Did the provider ask about or did the client spontaneously mention any problems with her current method? | | 1. Yes<br>2. No |
| 7. (If client had problems with her method)<br>Did the provider take any of these actions?<br>(Circle all that apply.) | | 1= Counseled client about problem.<br>2= Gave medical treatment.<br>3=Suggested/agreed that client change method. |

| | | |
|---|---|---|
| | | 4= refereed client elsewhere for treatment<br>98= No actions. |
| 8. Did the provider ask or did the client spontaneously mention a specific preference for a contraceptive method? | 1= Yes<br>2= No | |
| 9. (If yes) Which method? | 1. Combined pill<br>2. Progestin only pill<br>3. IUD<br>4. Condom<br>5. Diaphragm<br>6. Spermicidal<br>7. Other | |
| 10. Please note the methods that the provider mentioned or discussed during consultation.<br><br>(Circle all that apply.) | 1. Combined pill<br>2. Progestin only pill<br>3. IUD<br>4. Condom<br>5. Diaphragm<br>6. Spermicidal<br>7. Other | |
| 11. (If the client accepts a method or switches to a new method) For the new method accepted, did the provider talk about any of these issues?<br><br>(Circle all that apply.) | 1. How to use method<br>2. Advantage<br>3. Disadvantage<br>4. Medical side effect (e.g. bleeding, nausea etc.) | |
| 12 Did the provider overemphasize one method in particular? | 1= Yes<br>2= No | |
| **Discussion of STDs/HIV/AID** | | |
| 13. During the consultation, did the provider explicitly mention that the condom protects against STDS/HIV/AIDS? | 1= Yes<br>2= No | |
| 14. Did the provider indicate to the client that she might have an STD? | 1= Yes<br>2= No | |
| 15. Did the provider recommend to the client a medicine to be given to her husband for STDs treatment? | 1= Yes<br>2= No | |

| | New clients | Revisit clients |
|---|---|---|
| **Family planning decision, supply, and follow-up** | | |
| 16. Did the client decide to use a contraceptive method? | 1= Yes<br>2= No | |
| 17. (If not) What is the main reason client did not choose a method? | 1= Came for info only<br>2= Changed mind<br>3=Pregnancy suspected | |

| | | |
|---|---|---|
| (Circle one.)<br><br>(No more questions this section) | 4=Medical contraindications<br>5= Breastfeeding<br>6= Other health reason<br>7=Method not available<br>8= No obvious reason<br>9= Other. | |
| 18. What decision did the client make about family planning?<br>(Circle one.) | | 1= Continue same method<br>2= Stop<br>3= Switch |
| 19. (If stopping or switching) what is the main reason for stop or switch?<br>(Circle one.)<br><br>(If stopping, no more questions this section.) | | 1= Wants pregnancy.<br>2= Unwanted side effects<br>3=Inconvenient supply<br>4=Husband/partner doesn't like method<br>5=Switch spacing to permanent method<br>6= Other<br>98= Reason not clear. |
| 20. What new method did the client finally decide to use/switch to? | 1= Combined pill<br>2= Progestin only pill<br>3= IUD<br>4= Condom<br>5= Diaphragm<br>6= Spermicidal<br>7= Other | |
| 21. Was the method that the client decided to use the same method she initially preferred? | 1= Yes<br>2= No<br>3= No preference expressed | |
| 22. (If not) Why did the client decide not to use the method she initially preferred?<br><br>(Circle one.) | 1= Client changed her mind after hearing about methods<br>2= Provider felt there were medical contradictors<br>3= Provider felt method inappropriate due to age, etc<br>4= Pregnancy suspected<br>5= Method out of stock<br>6= Other:________________<br>7= No obvious reason | |
| 23. Was the method that the client decided to use supplied to the client today? | 1= Yes<br>2= No | |
| 24. (If not) Why was the client not supplied with her method today?<br>(Circle one.) | 1= Referred to another place for method<br>2= Client to return with menses<br>3= Method out of stock<br>4= Client to return for IUD procedures<br>5= Other:________________ | |
| 25. (If not) Was an alternative method provided to the client to use while | 1= Yes<br>2= No | |

| | |
|---|---|
| waiting to receive her method of choice? | |
| 26. (If yes) Which method was given for the interim? | 1= Combined pill<br>2= Progestin only pill<br>3= IUD<br>4= Condom<br>5= Diaphragm<br>6= Spermicidal<br>7= Other |
| 27. (If the client chose pills, condoms, and spermicides) How many units of the method was the client given? | ________________________ Units<br><br>Pill units=cycle, condom units= pieces, spermicides units= tubes (describe if otherwise) |
| 28. Was the client told when to return for resupply or follow-up? | 1= Yes<br>2= No |
| 29. Was the client told where to go for resupply or follow-up? | 1= Yes<br>2= No |
| 30. (If yes) Where?<br><br>(Circle all that apply.) | 1= This health facility<br>2= Another health facility<br>3= Pharmacy<br>4= Other. |

| | New clients | Revisit clients |
|---|---|---|
| **Medical Procedures Performed** | | |
| 31.If a speculum examination was performed, id the provider:<br>(Circle all that apply) | 1= Use a clean speculum?<br>2= Use gloves?<br>98= None of these actions | |
| 32. If an IUD was inserted, did the provider:<br><br>(Circle all that apply.) | 1= Sound the uterus?<br>2= Handle the IUD with aseptic procedures?<br>3= Use gloves?<br>4= Offer emotional support?<br>98= None of these actions | |
| 40. If gloves where used, were the gloves:<br><br>(Circle one.) | 1=Sterile<br>2= Clean but not sterile<br>3= Not clean<br>98= Unable to determine level of cleanliness | |

Time observation finished__________________ Duration of interaction: _________

Staple an exit interview to this questionnaire, follow the client out of the consultation, introduce her, and give both questionnaires to the interviewer.

**Annex: 4.5**

Questionnaire number: ____________

| *Exit Interview for Family Planning Clients* |
|---|

***Adapted from the Situation Analysis Approach to assessing Family Planning and Reproductive Health Services.(Miller et al., 1997) P. 67-97***

INSTRUCTIONS TOINTERVIEWER: Copy the information from the front of the observation guide to this page of the exit interview. Read the greeting on the next page to the client, and continue only if she gives her consent. For each item in the rest of the interview, circle the response or describe as appropriate.

| | |
|---|---|
| Health facility visited (name): | ______________________________ |
| Health facility code: | _________ |
| Study client number: | _________ |
| Date of visit: | Day ______ Month______ Year_____ |

| |
|---|
| Name of observer: ____________________________________ |
| Signature of team leader: __________________________________ |

| | |
|---|---|
| Type of health facility: | 1= Hospital<br>2= Health center |
| Type of sector: | 1= Government<br>2= NGO |
| Main purpose of visit: | 1= New FP acceptors<br>2= Repeat visit (without problem)<br>3= Repeat visit (problem with visit) |

## For all clients

**Read greeting:**

Hello. We would like to improve the services provided by the facility and would be interested to find out about your experience today. I would like to ask you some questions about the visit you have just had with the (health facility staff) and would be very grateful if you could spend some time answering these questions. I will not write down your name, and everything you tell me will be kept strictly confidential. Also, you are not obligated to answer any question you don't want to, and you may withdraw from the interview at any time. May I continue?

(If the client agrees to continue, ask if she has any questions. Respond to questions as appropriate, and then ask q.1.

If the client does not agree to continue, thank her and go to the next interview.)

| | |
|---|---|
| 1- During this visit, did you have any questions you wanted to ask? | 1= Yes<br>2= No |
| 2- (If yes) Did the provider let you ask the questions? | 1= Yes<br>2= No |
| 3- (If yes) Did the provider respond to your questions to your satisfaction? | 1= Yes<br>2= No |
| 4- During this visit, did the provider conduct any health examinations or procedures? | 1=Yes<br>2= No |
| 5- (If yes) Did the provider explain the examinations or procedures before they were performed? | 1= Yes<br>2= No |
| 6- Did the provider explain the results of the health examinations or procedures? | 1= Yes<br>2= No |
| 7- Where there any persons attended your examination session, in addition to the providers? | 1= Yes<br>2= No |
| 8- ( if yes) did this situation bother you? | 1= Yes<br>2= No |
| 9- (If yes to question 7) how many persons in addition to the provider attended your examination? | Number of persons:________ |
| 10- Where their any persons attended your consultation session, in addition to the provider? | 1= Yes<br>2= No |
| 11- (If yes) did this situation bother you? | 1= Yes<br>2= No |
| 12- (If yes to question 10) how many persons in addition to the provider attended your consultation? | Number of persons:________ |

| | |
|---|---|
| 13- During the consultation, did you fell that the provider was easy to understand when explaining things to you, or did you feel that the provider was difficult to understand? | 1= Easy to understand<br>2= Difficult to understand<br>98= Don't know |
| 14- Did any service provider tell you when to come back for another visit? | 1= Yes<br>2= No<br>3= Don't Know |
| 15- Are the hours this facility is open convenient for you? | 1= Yes<br>2= No<br>3=Don't know |
| 16- (If no) What time would be most convenient to you? | 1= Earlier in morning<br>2= Afternoon<br>3= Evening<br>4=Weekend<br>5= Don't know |
| 17- Have you ever turned away from this facility during official working hours? | 1= Yes<br>2= No<br>3= No previous experience with facility<br>98= Don't know |
| 18- About how long did you have to wait between the time you first arrived at this facility and the time you began receiving the services that you came for? | ________ Minutes<br>98= Don't know |
| 19- Do you feel that the wait between the time you first arrive at this facility and the time you began receiving the services you came for was reasonable or too long? | 1= Reasonable<br>2= Tool long<br>98= Don't know |
| 20- What was the main means of transport that you used to get here? (Circle one.) | 1= Walk<br>2= taxi<br>3= Bus<br>4=Private care<br>5= Relative or friends car |
| 21- Apart from this facility, is there any other place near your home where you can go for family planning? | 1= Yes<br>2= No<br>98= Don't know |
| 22- (If yes) What type of facility is it?<br>(Circle one) | 1=Health centre<br>2= Governmental hospital<br>3=Private hospital<br>4= Others<br>98=Don't know |
| 23- What would you say is the main reason you did not go there for family planning? (Do not read list. Probe for the main reason and circle one.) | 1= Inconvenient opening times<br>2= Takes too long to get there<br>3=Poor quality services<br>4= Fewer services available |

| | |
|---|---|
| | 5= Want to be anonymous<br>6= Have other reasons to come here ( e.g. MCH services)<br>7= More expensive there<br>8= Prefer provider here<br>9= Friends recommend this place<br>10= Familiar with this place<br>98= Other |
| 24- Now I would like to ask you about the cost of travel and services that you have received from this clinic. How much did you pay for your consultation? | ________(YR)<br>98= Don't know |
| 25- How much did you pay for registration/ card? | ________(YR)<br>98= Don't know |
| 26- How much did you pay for travel? | ________(YR)<br>98= Don't know |
| 27- Overall, do you fell that the total cost obtaining services is much too expensive, a little too expensive, or acceptable to you? | 1= Much too expensive<br>2= A little too expensive<br>3= Acceptable<br>98= Don't know |
| 28- (See client's main purpose of visit on page2, and then read this question.)<br>I understand that your main purpose for coming to the health facility today was (insert purpose from page 2). Is this correct?<br><br>(if correct, circle the same response that appears on page 2, and skip to the question indicated. If not correct, ask for the correct purpose of the client's visit, circle the correct response below, and skip to the question indicated) | 1= New acceptor<br>2= Revisit client (with problem)<br>3= Revisit client (with out problem) |

## For new acceptors

| | |
|---|---|
| 29- Did you get a contraceptive method during this visit? | 1= Yes<br>2=No |
| 30- (If no) What is the main reason you did not obtain a contraceptives method today? (Circle one.) | 1= Came for information only<br>2= Changed my mind<br>3= Pregnancy suspected<br>4= Contraindications for selected method<br>5= Continuous breastfeeding<br>6= Other health reason<br>98= Don't know |
| 31- Which method did you accepts today? | 1= Combined pill<br>2= Progestin-only pill<br>3= IUD<br>4= Condom<br>5=Diaphragm<br>6= Spermicidal<br>7= Don't know |
| 32- Did the provider mention any other methods to you? | 1= Yes<br>2= No<br>98= Don't know |
| 33- Did the provider tell you that you could switch methods if you are not happy with the method? | 1= Yes<br>2= No<br>98= Don't know |

## For revisit clients (without problems)

| | |
|---|---|
| 34- Just to make sure, I understand that you were using a contraceptive method when you came to the facility today. Is it correct that you were using a method? | 1= Yes<br>2= No was not using |
| 35- Which method were you using? | 1= Combined pill<br>2= Progestin-only pill<br>3= IUD<br>4= Condom<br>5=Diaphragm<br>6= Spermicidal<br>7= Don't know |
| 36- Are you planning to continue using this method? | 1= Yes<br>2= No<br>98= Don't know |

**For revisit clients (problem with method, want to change or stop)**

| | |
|---|---|
| 37- Just to make sure, I understand that you were using a contraceptive method when you came to the facility today. Is it correct that you were using a method? | 1= Yes, was using<br>2= No, was not using (return to q...) |
| 38-, Which method(s) were you using? | 1= Combined pill<br>2= Progestin-only pill<br>3= IUD<br>4= Condom<br>5=Diaphragm<br>6= Spermicidal<br>7= Don't know |
| 39- Is it correct that you had a problem, wanted to change methods or wanted to stop family planning? | 1= Yes<br>2= No |
| 40- What was the main problem you had, or the main reason you wanted to change or stop? (Circle one) | 1= Medical side effects<br>2= Husband did not like method<br>3= Wanted pregnancy<br>4= Didn't like method<br>5= Method unavailable/difficult to obtain<br>6= Other<br>98= Don't know |
| 41- What are you now going to do about family planning? | 1= Change to new method<br>2- Continuing with same method<br>3= Stop using any method<br>98= Don't know |
| 42- (If changing method0 what method(s) will you now be using? | 1= Combined pill<br>2= Progestin-only pill<br>3= IUD<br>4= Condom<br>5=Diaphragm<br>6= Spermicidal<br>7= Don't know |
| 43- Did the provider mention any other methods to you? | 1= Yes<br>2= No<br>98= Don't know |
| 44- Did the provider tell you that you could switch methods if you are not happy with this method? | 1= Yes<br>2= No<br>98= Don't know |

## For pill users

| | |
|---|---|
| 45- When a woman first starts using the pill, at what time in the menstrual cycle do you think she should start taking it? | 1= Within the $1^{st}$ –$5^{th}$ day of menstrual period<br>2= Any other answer<br>98= Don't know |
| 46- How often do you think a woman should take her contraceptive pills? | 1= One every day<br>2= Any other answer<br>98= Don't know |
| 47- If a woman forgets to take the pill for one day, what do you thinks she should do? | 1=Take the forgotten one immediately<br>2= Any other answer<br>98= Dot know |
| 48- Did the service provider give you a supply of the pills today? | 1= Yes<br>2= No |
| 49- (If no) where will you go to get your pills? | 1= Return to this health facility at another time<br>2= Another health facility<br>3= Other<br>4= Don't know |

## For IUD users

| | |
|---|---|
| 50- Did your visit to the facility today involve an IUD insertion, removal, or routine check-up? | 1= Insertion today<br>2= Removal<br>3= Routine check-up, previously inserted. |
| 51- How many years do you think a woman can keep using an IUD once it has been inserted? | 1= Years---<br>2= Don't know |
| 52- Does the IUD protect a woman against STDS/HV? | 1= Yes<br>2= Partially<br>3= No<br>4= Don't know |

## For condom and spermicidal users

| | |
|---|---|
| 53- Do condoms/spermicidal protect woman against STDs/HIV? | 1= YES<br>2=Partially<br>3= No<br>4= Don't know |
| 54- Did you receive a supply of condom or spermicidal today | 1= yes<br>2= no |
| 55- If no where will you go to get your condoms and/or spermicidal | 1= Return to this health facility at another time<br>2= Another health facility<br>3= Others<br>98= Don't know |

## For all clients

| | |
|---|---|
| 56- Now, I would like to ask you a few questions about yourself.<br>Are you currently breastfeeding | 1= Yes<br>2= No |
| 57- How old are you? | 1= Years---------<br>2= Don't know |
| 58- what is your current marital status | 1= Married<br>2= Divorced/separated |
| 59- Have you ever discussed family planning with your husband? | 1= Yes<br>2= No<br>98= Don't know |
| 60- Does your husband know that you use or that you are planning to use family planning? | 1= Yes<br>2= No<br>3= Don't know |
| 61- How many living children of your own do you have | ----------- Children |
| 62- What is the age of your youngest child? | ________ Months |
| 63-Would you like to have any (more) children | 1= Yes<br>2= No<br>3= Depend on husband<br>3= Depend on God<br>4= Not sure/undecided |
| 64- If yes when would you like the next child | 1= Less than one year<br>2= One year<br>3= Between one and two years<br>4= Two years<br>5= More than two years<br>6= Any other responses<br>7= Don't know |

## Annex 4:6

### Clients in-depth interview

The following statement was read to all participants prior to each interview.
The aim of this study is the assessment of the quality of family planning services provided to client of government and NGOs clinic in Sana'a city and to provide policy and decisions makers in Yemen with appropriate information to improve the quality and utilisation of the services provided to family planning clients. In order to achieve this purpose it is important to interview women who receive family planning services to learn about their experience with the services provided.

We would like to invite you to take part in our study.
If you agree to take part in the study, we will ask you about your experiences with family planning services. Please fell free to ask any questions about the study.

All the information given will be handled confidentially; your name will not appear in the study. In case you agree to the usage of a tape recorder, the tapes will be coded and destroyed after transcription.

Thank you very much for taking your time for this interview.
If you do not want to participate, you may say so. Even if you agree now, and so not want to continue at any point, you can withdraw at any time.

**Topic guide:**

I would like to interview you so that you can tell me what it is like to be attended to in this clinic or other clinic for family planning services. This interview can last 30-40 minute. I will tape the interview and later it will be typewritten.

Do you have a question before we start? Should we start? I am going to turn the tape reorder on.

Tell me how it was that you cam to this clinic.
How do you find this clinic?
Do you find that this clinic is different from others?
Please give me more details.

Have you been to other clinic before for the same services?
What make you change or switch to this clinic?

What do you think is the issues, which might discourage client from, attended any clinic for family planning services?

What do you think are the thing that makes women chose a specific clinic to attend?
Do you think that the provider can make anything to make their clinic attractive for clients?

Can you tell of any factor, which hinders your attendance to a family planning clinic, or your next follow up visits to the clinic?
Is there any other thing that I did not ask and that you would like to say?

**Annex 4.7**

**Research team training programme**

| Day | Activities |
|---|---|
| One | -Introduction<br>-Training plans.<br>- Background to the studies.<br>- Concept of reliability, validity, and some pitfalls in the data collection process.<br>- Overview of the instruments |
| Two | Review of the observation Guide.<br>Review of the FP client Exist interview |
| Three | Plenary meeting to discuss arising from instrument reviews.<br>Guidelines for conducting interview. |
| Four | Review administration of specific instruments for each group.<br>Role-playing.<br>Continue role-playing.<br>Plenary meeting to discuss role playing experiences |
| Five | Fieldwork at selected SDP sites.<br>Each team to practice administering the data collection instruments. |
| Six | Continue fieldwork at selected SDP sites. |
| Seven | Meeting to discuss the outcome of the fieldwork.<br>And preparation of the schedule for starting the actual data collection work.<br>Administrative and financial issues |

## Annex 4.8: Operation definition for quality of care elements of quality

### Operational definitions

*Quality of care:*

Quality is defined here in terms of the way individual couples (or clients) are treated by the system providing services (Jain 1998). Using this principle, Bruce (1990) working definition of quality of services that incorporates the following six elements will be adapted:

Choice of method
Information given to users,
Technical Competence,
Interpersonal relations,
Mechanism to encourage continuity, and
Appropriate constellation of services

***Choice of contraceptive methods*** refers both to the number of methods offered on a reliable basis and their intrinsic variability. Which methods are offered to serve significant subgroups as defined by age, gender, contraceptive initiation, lactation status, health profile? Are there satisfactory choices for those women who wish to space births, those who wish to limit them, those who cannot tolerate hormonal contraceptives, and so forth?

***Information given to users*** refers to the information imparted during service contact that enables clients to choose and employ contraception with satisfaction and technical competence. It includes: information about the range of methods available and their scientifically documented contraindications, advantages, and disadvantages; screening out unsafe choices for the specific client and providing details on how to use the method selected, its possible impacts on sexual practice, and its potential side effects; and finally, an often neglected element, explicit information about what clients can expect from service providers regarding sustained advice, support, supply, and referral to other methods and related services , if needed.

***Technical competence*** involves principally, factors such as the competence of the clinical technique of providers, the observance of protocols, and meticulous asepsis required to provide clinical methods such as intrauterine devices (IUDs), implants, and sterilization.

***Interpersonal relations*** are the personal dimensions of service. Relations between providers and clients are strongly influenced by a program's mission and ideology, management style, resource allocation (for example, patient flow in clinical settings, the ratio of workers to clients, and supervisory structure.

***Mechanism to encourage continuity*** can involve well-informed users managing continuity on their own or formal mechanisms within the program. They can rely on community media or on specific follow-up mechanisms, such as forward appointments or home visits by workers.

**Appropriate constellation of services:** refer to situating family planning services so that they are convenient and acceptable to clients, responding to their natural health concepts, and meeting pressing pre-existing health needs. Services can be appropriately delivered through a vertical infrastructure, or in the context of maternal and child health (MCH) Initiatives, postpartum services, comprehensive reproductive health services, employee health programs, or others **(Bruce 1990:63-64).**

**Service Utilisation (definitions of Indicators)**:

***Number of visits to service delivery point(s)***
The total number of visits made by clients to a service delivery point (or to all SDPs within a system) in a given reference period (e.g., one year)

***User characteristics***
A socio-demographic profile of current users of contraceptive methods.
Relevant characteristics include: Age, parity, economic status, education level... etc

## Annex 4.9:

Indicators adopted for measuring quality of care and utilization of services.

**Quality of care Indicator**

***Note: source of data for indicators is as follows: (O)= Observation guide, (F)= FP exit interview,***

***Interpersonal relations***

Percent of FP clients who feel that the provider listened to her concern (F)
Percent of FP clients who a) had questions, b) provider let ask the question, and c) were satisfied with answer (F)
Percent of FP clients reporting that physical examinations were explained beforehand and afterward (F)

**Choice of Methods**

Percent of new FP clients who were told about various methods (o)
Percent of new FP clients asked if they have a preference for a method (o)
Percent of new FP clients who report that they received their method of choice (F)

**Information exchange**

Percent of FP clients with whom various FP issues were discussed (o)
Percent of FP clients who received information on the method accepted (o)
Percent of FP clients who are knowledgeable about their method (F)

**Technical Competence**

Percent of FP clients clinically assessed for FP (o)
Percent of IUD insertions during which providers performed various actions (o)
Percent of procedures during which providers used sterile glove (o)

**Mechanisms to encourage continuity**

Percent of FP clients reporting that they were given a follow-up date (f)
Percent of FP clients who received a supply of their method (o)

**Appropriateness and acceptability of services**

Percent of FP clients who have ever been turned away from this SDP during working hour's (F)
Mean reported waiting time among FP clients' (F)

**Utilisation of services Indicators**

Number of visits to service delivery points (service statistics)
Number of new family planning acceptors in the previous year (Service statistic)
Distribution of SDPs by FP client load(service statistics)

**Clients characteristics:**

a- Age: percentage of clients in defined age groups (15-19) years, (20-29 years ...etc)
b- Number of children: percentage of clients with number of children in defined age groups (up to 1 year, 1-2 years, above 2 years).
c- Highest level of education: percentage of clients falling into defined educational categories(no school , primary , Secondary + )

**Annex 4.10: Indicators developed for this study**

- Percent of clients concerned due to the attendance of others who did not participate in providing care their consultation (auditory privacy).

- Percent of clients concerned due to the attendance of others who did not participate in providing care during their medical examination (visual privacy).