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**Final Evaluation of the
Clinical Services Improvement
Subproject of the Egyptian Family
Planning Association under the
Population/Family Planning II Project**

by

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POPTECH'S REPORT-AT-A-GLANCE SERIES

Final Evaluation of the Clinical Services Improvement Subproject of the Egyptian Family Planning Association under the Population/Family Planning II Project (1987-1993)

SUMMARY

The Clinical Services Improvement (CSI) subproject was designed to upgrade the quality and quantity of family planning services in the Egyptian Family Planning Association (EFPA), the foremost family planning private voluntary organization (PVO) in Egypt at the time. Through the end of 1992, CSI had established 17 primary centers and 95 subcenters in 17 governorates; served 298,091 new family planning clients; and provided another 311,731 related services. CSI's principal contribution has been the establishment of high-quality centers which have spearheaded a new national emphasis on the quality of family planning services. Although the quality of CSI family planning services has been excellent, the cost of such quality has been high, relative to MOH costs. CSI's establishing, equipping, and furnishing of clinics and offices have been extravagant and have included equipment not essential to family planning or other related services. CSI centers are also very underutilized for family planning. It is unclear why the offered high-quality services are so underutilized. Institutional and management turmoil is one possible explanation; market demand is another. No professional research was undertaken to develop a market profile on proposed family planning product, place, price and promotion. In its struggle to be successful in an increasingly competitive family planning market, CSI has resorted to negative advertising and dissemination of false information which have the potential to create medical barriers to family planning rather than to promote greater acceptance and use of the program as a whole.

USAID should fund market research conducted by an independent, qualified firm to determine if there is a long-term market for CSI. Unless the research shows that there is a clear and sufficient market niche for CSI to be self-financing, USAID should phase out all funding for CSI over the next two years. CSI should immediately cease its negative advertising and false information.

FACTORS AFFECTING PROJECT PERFORMANCE

Facilitating Factors

- The large contraceptive technology training program supported by the Population/Family Planning II Project resulted in trained family planning professionals who were able to staff the new program across the country.

Constraints

- CSI evolved in incremental steps rather than being designed as a strategic whole.
- CSI assumed that its principal competitor, the MOH, offered limited family planning services and that they were of poor quality. In fact, the MOH was rapidly expanding and improving its services in the same cities and at the same time CSI was developing.

LESSONS LEARNED

- **A single project, although not itself successful, may have a highly positive impact upon the total family planning program.**
- **Continual project modifications can gradually shift the purpose of a project such that the assumptions of demand which supported the original project are not valid for the revised project. In the case of the CSI subproject, market research was unnecessary for the original purpose of upgrading the EFPA; however, an analysis of the market, in terms of product, place, price, and promotion, should have preceded the creation of a new family planning FVO meant to be self-financing.**

Source: Final Evaluation of the Clinical Services Improvement Subproject of the Egyptian Family Planning Association. L. Cobb, R. Beasley, D. Harbick, K. MacManus, M. Wright. 1993. Report No. 92-184-149(b).

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Table of Contents

Preface		v
Acknowledgments		vii
Project Identification Data		ix
Glossary		xi
Executive Summary		xiii
1. Introduction		1
1.1 Project Background		1
1.2 Origin of the Project: The Egyptian Family Planning Association (EFPA)		1
1.3 Modifications to the Project		2
2. Clinical Services		5
2.1 Clinical Guidelines		5
2.2 Clinics: Location, Space, and Equipment		5
2.3 Staffing		6
2.4 CSI New Family Planning Acceptors		7
2.5 Other Services		18
3. Outreach and IEC		21
4. Quality of Care		23
4.1 Choice of Methods		23
4.2 Technical Competence of Providers		23
4.3 Information Provided		24
4.4 Interpersonal Relationships		25
4.5 Continuity and Follow-Up		25
4.6 Constellation of Services		25
4.7 Summary on Quality		26
5. Sustainability		27
5.1 Defining Sustainability		27
5.2 Institutional Sustainability		27
5.3 Managerial Sustainability		32
5.4 Financial Sustainability		33
6. Quality of Care: Lessons Learned in the MOH/SDP and CSI Subprojects		41
6.1 Safety and Effectiveness		41
6.2 Efficiency		43
6.3 Replicability		43
6.4 Cost		43

7.	Upper Egypt	45
7.1	The Strategy to Date	45
7.2	Creation of Demand for Family Planning Services	47
8.	Principal Conclusions and Recommendations	49
8.1	Conclusions	49
8.2	Recommendations	50

List of Tables

Table 1	CSI New Family Planning Acceptors by Governorate, 1988-1992	8
Table 2	CSI Primary Centers: Installed Capacity and Utilization by New Family Planning Acceptors (NFPA)	10
Table 3	CSI New Family Planning Acceptors by Previous Use	29
Table 4	CSI Budget by Revenue Sources in LE Income, 1987-1991 and Projected Income 1/92-5/93 and Use of CSI Service Fee Revenue Account, Actual 1987-1991 and Projected 1992-1993	35
Table 5	CSI Cost Line Items: Actual LE Expenditures, 1987-1991 and Projected 1/1/92-5/31/93	36
Table 6	1992 Method Mix in the MOH and CSI	41
Table 7	Donor and Total Expenditures in Egyptian Pounds (LE) for the MOH/SDP and CSI and the Annual Growth in Couple Years of Protection Provided by these Agencies for GOE FY 1988/89 to FY 1991/92	44
Table 8	Comparison of CPR in 1988 DHS and in 1992 DHS, by Place of Residence and Contraceptive Method	46
Table 10	Total Fertility Rate by Residence, 1988-1992	47

List of Figures

Figure 1	Upper Egypt CSI Primary Centers: Total NFPA per Workday, by Month, 1989-92	13
Figure 2	Upper Egypt: Average NFPA per CSI Primary Center, per Workday, per Month, 1989-92	14
Figure 3	Lower Egypt: CSI Total NFPA per Workday, by Month, 1989-92	15
Figure 4	Lower Egypt CSI Primary Centers: Average NFPA per Workday, per Center, 1989-92	16
Figure 5	CSI Primary Centers in Upper and Lower Egypt: Actual Average NFPA per Center per Workday per Month, 1989-92, versus Projected Full Capacity	17
Figure 6	Numbers of CSI NFPA, New Other Services and FP Revisits	18

List of Appendices

Appendix A	Description of the Evaluation	55
	Attachment 1 Scope of Work	57
	Attachment 2 Principal Contacts	59
	Attachment 3 Materials Reviewed	61
Appendix B	Secondary Conclusions and Recommendations	65
Appendix C	Figures — Client Activity in CSI Primary Centers	71
Appendix D	Report of an Interview with EFCS on Norplant	89
Appendix E	Article on the Acceptability of Norplant in Egypt	91

Preface

This evaluation is one of a two-part evaluation of the provision of clinical family planning services under the USAID/Cairo Population/Family Planning II Project. The two evaluations, one of the Ministry of Health Systems Development Subproject (MOH/SDP) and the other of the Clinical Services Improvement Subproject (CSI), were undertaken simultaneously. Both institutions are discussed together in the chapters in each report dealing with lessons learned in quality of care and strategies for Upper Egypt.

This report is on CSI. Its companion report, on the MOH/SDP, is *Final Evaluation of the Family Planning Systems Development Subproject of the Ministry of Health under the Egypt Population/Family Planning II Project*, Report No. 92-184-149 (a).

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Project Identification Data

1. **Project:** Population/Family Planning II (263-0144)
Subproject to be evaluated: The Clinical Services Improvement Project (CSI) of the Egyptian Family Planning Association (EFPA)
2. **Project activity completion date:** CSI: December 31, 1993
3. **Technical assistance contractor:** CSI: Pathfinder International and its subcontractors International Health Programs and Margaret Sanger Center; Population Communication Services; operations research through Family Health International
4. **Period to be evaluated:** CSI: July 1, 1987 - present
5. **Project purpose:** CSI: To establish 112 new EFPA family planning clinics in 20 governorates throughout Egypt; introduce in these centers quality assurance management systems and procedures; set-up and maintain systems for financing the continuation of the new EFPA centers after donor support ends.

Glossary

A.I.D.	Agency for International Development (Washington)
CPR	contraceptive prevalence rate
CPS	contraceptive prevalence survey
CSI	Clinical Services Improvement Project
CY	calendar year
CYP	couple year(s) of protection
EDHS	Egyptian Demographic and Health Survey
EFCS	Egyptian Fertility Care Society
EFPA	Egyptian Family Planning Association
EMCHS	Egyptian Maternal and Child Health Survey
FY	fiscal year
GOE	government Of Egypt
HRD	human resource development
IEC	information, education, and communication
IMR	infant mortality rate
IUD	intrauterine device
LE	Egyptian pound
LPD	local project director
MCH	maternal and child health
MOH	Ministry of Health
MOSA	Ministry of Social Affairs
MWRA	married women of reproductive age
NFPA	new family planning acceptors
ob/gyn	obstetrics/gynecology
PCS	Population Communication Services (project)
PVO	private voluntary organization
SDP	Systems Development Project
NPC	National Population Council
USAID	United States Agency for International Development (mission)

Executive Summary

Introduction

The Clinical Services Improvement (CSI) subproject of the Egyptian Family Planning Association (EFPA) under the Population/Family Planning II Project was developed in 1987 following the mid-1980s realization by the government of Egypt that rapid population growth was a major problem which had to be addressed. As CSI entered its second year in 1988, approximately 2.9 million couples were practicing family planning in Egypt, representing a contraceptive prevalence rate (CPR) of 37.6 percent for all methods and 35.4 percent for modern methods. Egypt's population was increasing at the rate of 2.8 percent annually.

The goal of the CSI project was to contribute to Egyptian fertility reduction by means of substantially increasing the number of family planning acceptors served through EFPA clinics nationwide. CSI was to set up 17 primary centers and 95 subcenters in 17 governorates to increase CPR and decrease fertility. The project was designed to improve and upgrade the quality and quantity of family planning services in the EFPA.

The principal contribution of CSI over the project period has been the establishment of high-quality centers which spearheaded a new national emphasis on the quality of family planning services. This is an important contribution which even other service providers stated led to improvements in quality in both the private and public sectors. CSI is to be commended for this service to the Egyptian national program. At the end of four years, however, CSI centers are very underutilized for family planning. Whereas they have the installed capacity to see over 240,000 new family planning acceptors a year, they are only seeing 40 percent of that number. Utilization is generally lower in Upper Egypt than it is in Lower Egypt.

Project Implementation

CSI has evolved away from its original purpose and has steadily redefined and reduced its family planning outputs. Through a series of project modifications, CSI moved from its original purpose of upgrading the EFPA to the point that it is currently seeking status as an independent family planning non-profit organization. As this evolution occurred, however, CSI failed to define its own market segment. Rather, it has been supply driven, believing that if quality family planning services were offered, they would be fully utilized; this has not been the case. CSI has not adequately analyzed demand for those services and, in the absence of such an analysis, there are only theories as to why the offered high-quality services are so underutilized.

CSI has struggled to differentiate itself in a family planning market which has become increasingly competitive. In its struggle to be successful in that market, CSI has resorted to negative advertising and dissemination of false information which have the potential to create medical barriers to family planning rather than to promote greater acceptance and use of the program as a whole.

CSI has not been a successful self-financing model for the private voluntary organization sector. Its establishing, equipping, and furnishing of clinics and management offices have been extravagant with an emphasis on appearance which it equates with quality. There is a good deal of equipment which is excessive, expensive, and not essential for family planning. Centers have been overstaffed in terms of client needs, partially due to low utilization.

Current CSI cost-cutting moves focus on reducing costs at the clinic level. Together with cutting costs, CSI is undertaking new strategies to generate revenues. Its 1993-1997 self-financing plan, however, is built upon the unrealistic assumption of full utilization in all centers. Even if all CSI centers should operate at full capacity, CSI would still not be able to cover all its operating costs by 1997.

Principal Recommendations

1. USAID should fund market research conducted by an independent, objective, and qualified firm to determine if there is a long-term family planning market for CSI, and to determine the characteristics of that market, including prices that market would pay and what that market perceives as quality and acceptability. Based on the results of that research, USAID should determine the size and characteristics of the CSI services it wishes to support.
2. All future CSI quarterly and annual reports should present disaggregated data on the utilization of CSI clinics by NFPAs, using a constant, clearly defined indicator of utilization. The numerator of such an equation would be the actual numbers of NFPAs; the denominator would be the actual capacity for NFPAs. Those reports should be used for decision making on closing centers, with joint USAID-CSI decisions being made in light of the centers' utilization for family planning service delivery.
3. The 30 centers which CSI defines as "low performers" should be closed and their equipment and supplies put in storage. USAID should not fund the relocation or opening of these or any other new primary or subcenters until the results of the market research indicate a long-term demand for CSI's family planning services in a specific location.
4. CSI should immediately cease its use of negative advertising and dissemination of false information. A program to re-educate and re-acclurate CSI staff in ethical marketing that promotes CSI without creating barriers in the family planning program or casting aspersions on other family planning service providers should be undertaken immediately.
5. Unless the market research shows that there is a clear and sufficient market niche that would enable CSI to be self-financing, USAID should phase out all funding for CSI over the next two years. If USAID chooses to phase out the CSI project, careful thought should be given to other services picking up the CSI caseload and the distribution of facilities and equipment to other providers who will make a more efficient use of those items.

1. Introduction

1.1 Project Background

Egypt has one of the oldest organized family planning programs in the developing world. Private voluntary programs were established in the 1950s, and a government program was begun in 1965. Until the 1980s, however, these programs had little impact. According to the 1982 USAID Population Sector Assessment Report, Egypt was the only country in the world in which the rate of population growth had increased by over 40 percent during the previous 10-year period. That report warned that if this growth were allowed to continue unchecked, the population would double in the next generation, adding over a million persons to the population every nine months.

The 1984 Contraceptive Prevalence Survey (CPS) contributed to a growing awareness that the population growth rate had to be checked. The CPS noted that Egyptian married women of reproductive age (15-49) were having significantly more children than they wanted. Over half the women surveyed would have liked to cease childbearing; the current family size of 60 percent of the women age 40 and over exceeded what they regarded as ideal (3 children). Completed family size was estimated to be close to seven children.

A 1989 program assessment¹ noted that although family planning activities had been present in Egypt for a quarter of a century, there had been a definite acceleration of accomplishments during the previous few years; and that prior to that time, population activities had been characterized by strategic uncertainty and indifferent program performance. The establishment of the National Population Council (NPC) in 1985 was a clear message that family planning was essential to Egyptian well-being. The NPC proved to be a focal point for the articulation of presidential decrees concerning population, international donor contact, and raising and broadening the family planning discussion. In 1988, the government of Egypt (GOE) set a goal of reducing the total fertility rate (TFR) from 4.5 to 3.7 by the year 2001; to do so, the contraceptive prevalence rate (CPR) would have to reach 50 percent by that year. Intensive efforts and significant expansion would be necessary in both the public and private sectors to reach the 2001 goal. In 1991, the NPC revised and accelerated its targets to reach a CPR of 53 percent and a TFR of 3.5 by 1997.

As the Clinical Services Improvement (CSI) subproject entered its second year in 1988, approximately 2.9 million couples were practicing family planning in Egypt, representing a contraceptive prevalence rate of 37.6 for all methods and 35.4 percent for modern methods. Egypt's population was increasing at the rate of 2.8 percent annually.

1.2 Origin of the Project: The Egyptian Family Planning Association (EFPA)

The goal of the CSI project, as described in the 1987 project paper, was ". . . to contribute to Egyptian fertility reduction by means of substantially increasing the number of family planning acceptors served through EFPA clinics nationwide. It is estimated that over 1.7 million new acceptors of contraceptive methods will be reached throughout the five and a half year life of this project."

¹Gillespie et al. 1989

CSI was designed to improve and upgrade the quality and quantity of family planning services in the EFPA, described in the project paper as "the foremost national organization providing organized clinical family planning services with over 500 family planning clinics." The paper went on to state that the EFPA was not currently operating at a level anywhere near its capacity. This was found to be due to problems of poorly equipped centers, inadequately trained and underpaid staff, and major management deficiencies at all levels.

The CSI project was designed to overcome EFPA's major weaknesses through the establishment of new and the upgrading of existing physical facilities and equipment throughout Egypt; establishment of effective management systems for planning, supervision, and control; and development of effective systems of community outreach to inform and motivate the population to use contraception.

Eight outputs were identified, including 18 primary centers, 120 upgraded EFPA clinics, over 1.7 million new acceptors, new modern EFPA management systems, high-quality clinical services, and a fee-for-service system that would provide for self-sufficiency by the end of the project.

The project was designed as a collaboration of USAID, EFPA, and the Ministry of Social Affairs (MOSA) under whose authority the EFPA operates in Egypt.² Project funding was to come from USAID, MOSA, and fees for services.

1.3 Modifications to the Project

In 1988 and 1989, a series of amendments modified the project, beginning the process of shifting the project's purpose from working within the EFPA to upgrade it, to working outside it. Project implementation letter no. 16, amendment no. 5 stated, "If no clinic (EFPA) meets the standard and location criteria, CSI may establish a new subcenter clinic." Amendment no. 7 to the same document stated, "There is no need for further surveys: all CSI subcenters will be established apart from EFPA facilities."

In August 1990, the original project paper was modified for the first time (a second modification occurred in December 1992 and a revised version of that modification was approved in January 1993). The 1990 modification listed a number of EFPA characteristics which were judged to be such impediments that improving EFPA from within was judged impossible.³ CSI was redefined to be a special project of the EFPA; the new purpose was defined as being to establish 158 new EFPA centers in 18 to 23 governorates; to introduce in these centers quality assurance management systems and procedures that would lead to effective, satisfied contraceptive use from the clients point of view; and to set up and maintain systems for financing the continuation of the new EFPA centers after donor support ended.

²EFPA is a private voluntary organization (PVO) which provides family planning and other social welfare services. PVOs are under the wing of MOSA.

³The impediments included inability to impose centrally controlled management systems, clinic facilities too small to serve a large volume and with physical limitations that could not be improved through renovation, insufficient resources to equip existing centers to meet high-quality standards, staffing difficulties, and "... dominance of an approach to family planning service delivery that stresses meeting client social welfare needs and excludes marketing and self-financing as essential elements of organizational strategy."

Project outputs were also redefined at this time. Targets for new family planning acceptors (NFPA) were reduced from 1.7 million to 867,000. Additionally, 631,000 other related reproductive health clients were to be served over the life of the project. High-quality services and self-financing were defined in more detail. "Comprehensive service marketing programs to promote the CSI centers to recruit NFPAs, to influence the clients' return to the centers for follow-up visits, and to evaluate client satisfaction with CSI services" were planned. Whereas the original project paper described upgrading EFPA, the 1990 modification described project efforts as being to develop CSI as a distinct entity, including the development of CSI-specific modern management systems. "Maintaining of good relationships with EFPA" was seen as a means of achieving "quality assurance management systems."

The revised second modification presents a very different project. The EFPA is not mentioned in the goal, purpose, or outputs of the project. The revised goal is to contribute toward reducing Egyptian fertility and to contribute toward the self-financing of the Egyptian private sector family planning program by establishing a self-financing model in the CSI project. The purpose was redefined as

- 369,000 new family planning users served by May 1993 through 112 quality family planning centers;
- centers adhering to program standards and procedures; and
- centers to generate 52 percent of operating costs by May 1993.

The revised outputs were listed as

- establishment of high-quality family planning centers: 17 new primary centers in 17 governorates, and 95 new subcenters;
- increase in the number of new family planning and other services clients: 369,000 NFPAs, 369,000 new other service acceptors, and 686,000 revisitors by May 1993;
- development of high-quality clinical services;
- trained personnel at the central, governorate, and branch levels;
- establishment of modern management systems; and
- development of a business/financial plan which shares project financing with USAID, including the generation of LE 7,000,000 from fees for services, LE 2,123,000 from MOSA contributions, and LE 4,163,000 from a revenue account to be established by CSI with funds generated from fees for services.

2. Clinical Services

2.1 Clinical Guidelines

The *CSI Family Planning Clinical Guidelines* were prepared in English in 1989 by Egyptian specialists with international technical assistance. The guidelines have been translated into Arabic. In syllabus format, they are printed on durable paper with space for notes, and presented in a loose-leaf binder to permit additions/corrections. The outline for the basic reproductive health care visit is thorough and is followed by guidelines with helpful illustrations for current methods: IUD, oral contraceptives, and injectable hormonal contraceptives, barrier methods, and a review of lactation. Guidelines for the anticipated "associated services" at CSI clinics include pregnancy detection, prenatal and postpartal management, investigation of infertility, and dysmenorrhea. Directions for the diagnosis and treatment of common gynecological infections are given with specific signs requiring referral to other clinical services. The concluding sections on the care and preparation of instruments, arrangements for physical examinations in the clinic, and an emphasis on housekeeping and infection control set useful and important standards. Detailed instructions are given for the use of the electric boiler and the autoclave, but no directions are given for dry sterilization though expensive ovens for this purpose were present in the clinics visited. The guidelines were found in perhaps two-thirds of the clinics and all physicians were familiar with them. A chapter on counseling would be quite useful for physicians.

In addition to the *Family Planning Clinical Guidelines*, which are intended for use primarily by physicians, CSI has prepared a counseling manual for counselors, an outreach worker's manual, and a nurse's manual.

CSI is in the process of establishing a multi-purpose worker position that would consolidate the functions of the receptionist, outreach, and counseling positions. These workers would benefit from a comprehensive manual in Arabic that included information on clinical, nursing, and counseling functions.

2.2 Clinics: Location, Space, and Equipment

The locations of CSI clinics are readily identified by a cartouche logo. Clinics are near some center of activity (such as a bus stop or a market) but, to ensure adequate space, are usually located in upstairs apartments, often up two and sometimes six flights of stairs. In one instance, the building contained a pharmacy on the ground floor, private clinics on the second and third floors, and the CSI clinic on the fourth floor.

CSI primary centers and subcenters are similar. In CSI subcenters, there are four to six rooms: a large furnished waiting room, a counseling room, an office for the outreach workers and accountant, the examination room, room for infection control, and sometimes a separate laboratory, plus a toilet. Primary centers are larger, have two or three examining rooms, a laboratory, more office space, and in some clinics, separate toilets for male and female staff and clients. All rooms are well maintained and arranged for clinical services. Clinics are furnished with carpets, tables with video cassette players, chairs, posters, and bookcases with color-coded charts. The waiting and counseling rooms

bespeak "quality" in the sense of "class." There are ample desks and chairs in the outreach, counselors, and accountants offices; no one is crowded.

The examination rooms are comfortable, complete with well-arranged desk and chairs, examination table, light and screens, sterile equipment (always at least five sets for vaginal examinations and IUD insertions), basins for used instruments, and finally the cabinet of contraceptives and extra instruments together with a Dopler (electronic instrument to listen to the fetal heart) and a light box to read X-rays. The infection control room is equipped for the cleansing and boiling, autoclaving, and dry sterilization of instruments. The laboratory counter holds a centrifuge, a calorimeter, appropriate glassware, a hemoglobinometer, pipettes and stains for complete blood count, and a microscope with two and sometimes four lenses; occasionally there is a second microscope. There is an incubator and a glass-covered balance such as is used in quantitative chemistry laboratories. The refrigerator contains sera for blood typing, pregnancy testing, and sometimes sera for immunizations.

The laboratory has a surprising breadth of equipment in relation to the level of training of the technicians. No documentation on the use of the more elaborate instruments was found during team visits. The only reported use of the balances was for the weighing of sodium citrate to make a seldom-used solution which is readily available commercially. No use was made of incubators in any of the clinics visited, nor were there any reports of microscopic examinations of vaginal smears for infections. Two clinics have ultrasound equipment; CSI has requested funds to purchase such equipment in additional primary centers. CSI stated it has ultrasound equipment for income-generating purposes; CSI leadership stated that testing is offered because "high-tech" is perceived by the clients as "quality." CSI stated that it uses and promotes this perception in its marketing to attract clients.

2.3 Staffing

2.3.1 Staffing Patterns

The CSI primary centers visited had staffs of 12, consisting of 2 physicians, 2 nurses, 2 outreach workers, 1 counselor, 1 receptionist, 1 secretary, 1 lab technician, 1 accountant, and 1 cleaner. Staff in subcenters usually included 6 to 8 persons: 1 physician, 2 outreach workers, 1 nurse, 1 receptionist, 1 cleaner; in some subcenters, there were also 1 lab technician and 1 accountant. All clinics are staffed by female physicians who have been trained in family planning; the supervising senior physician in each governorate is a gynecologist, which enables the use of injectables by the general practitioners under his/her supervision. This meets a readily identifiable demand for this long-acting, safe hormonal contraceptive.

In the primary centers, nurses have been trained in family planning but are not fully utilized, as special counselors are present. Laboratory staff are recruited from the biochemical field but have not had microbiological training for the extensive equipment available. In the absence of the laboratory technician, in at least one instance, the nurse was accurately performing the hemoglobin and urine analyses.

2.3.2 Recruitment

All professional staff are recruited locally and then referred to Cairo for an interview and written examination; the final selection is made locally, based on Cairo's review.

CSI is to be commended for the effort it has made and the success it has had in recruiting female doctors. The Sohag local project director stated it had been easy to staff the primary center in Sohag with female doctors, but that it has been difficult to find a female doctor for each of the subcenters in small towns. According to the local project director, female doctors do not like to work in the villages outside the primary city; in order to staff one subcenter with a female doctor, CSI was providing her with transportation to and from the clinic each day.

Of the 12 CSI Sohag doctors, 7 have been with the project since it started in 1988.

2.4 CSI New Family Planning Acceptors

2.4.1 Targets and Achievements

To achieve its revised goal of 369,000 NFPAs, CSI opened 17 primary centers and 95 subcenters in 17 governorates in three phases from 1988 to 1992. Primary centers were established to serve a population of 400,000; subcenters were to serve a population of 250,000.

CSI uses the term "new acceptors" for women who come to a specific clinic for the first time. They may or may not be new acceptors of family planning. CSI data indicate that about 29 percent of its new clients are, in fact, new acceptors of family planning. This report uses CSI's terminology with the proviso that the term "new acceptor" simply means a new client to a particular clinic.

By the end of 1992, CSI had 298,091 NFPAs in its centers in 17 governorates. Table 1 presents the growth in the annual number of NFPAs, as additional governorates and new clinics were opened, from 971 NFPAs in 1988 to 98,661 in 1992. CSI will most probably meet the revised target of 369,000.

2.4.2 Capacity and Utilization of CSI Clinics⁴

Meeting the revised target of 369,000 new acceptors, however, does not mean that the CSI centers are being fully or well utilized for family planning. A review of service statistics at the clinic level provides a better review of CSI performance. New acceptor statistics for the 17 primary centers were analyzed in detail.⁵ Utilization of the subcenters varies; many of the subcenters visited saw only 0-2 NFPAs a day.

⁴Capacity and utilization are interrelated management concepts. A primary center with two fully equipped examining rooms, two physicians, two nurses, and other staff and open seven hours a day has the capacity to serve 14 NFPAs a day, given the stated CSI service mix and staff productivity standards. If the center is only seeing 7, then the level of utilization is 50 percent. If for some reason, the center were to lose the equipment, supplies, or staff for one of the examining rooms, its capacity would be 50 percent of that previously.

⁵The source of all data is the CSI Clinics Achievement Report which presents data on the number of workdays, number of NFPAs, and number of other services for each primary and subcenter, for each month since the clinic opened. Appendix C contains graphs on each of the primary centers charting the number of NFPAs per workday per month from the date of clinic opening to October 1992, the last month for which the CSI headquarters had data at the time of the evaluation.

Table 1

CSI New Family Planning Acceptors by Governorate, 1988-1992

Governorate	1988	1989	1990	1991	1992	Total
Minia	137	1,453	4,195	5,225	4,536	15,546
Assiut	122	1,509	5,113	5,823	4,383	16,950
Sohag	240	2,641	9,871	12,198	10,386	35,336
Giza	92	801	5,265	9,030	6,946	22,134
Gharbia	198	3,037	10,998	12,510	11,384	38,127
Daqahlia	182	1,755	9,222	15,140	12,257	38,556
Qena		401	2,855	9,393	7,696	20,345
Beni Suef		392	1,743	3,200	3,179	8,514
Qaliubia		480	3,131	7,398	5,583	16,592
Kafr El Sheikh		272	2,757	6,067	4,322	13,418
Alexandria		808	4,476	5,719	3,913	14,916
Sharqia		531	3,584	10,310	8,322	22,747
Damietta			469	3,737	2,936	7,142
Menoufia			546	3,246	3,357	7,149
Beheira			483	4,456	5,099	10,038
Fayum			439	1,586	896	2,921
Aswan			785	3,409	3,466	7,660
Total	971	14,080	65,932	118,447	98,661	298,091

Source: CSI spreadsheets

CSI defined full capacity in these centers as 7 NFPAs per day, plus 7 new other services and 14 revisitors, for a total of 28 clients per examining room per day. It was assumed that one year after opening, centers would operate at 50 percent capacity; after two years at 83 percent capacity; and after three years at 100 percent capacity. In the recent CSI Self-Financing Strategic Framework document (January 29, 1993), CSI stated that 23 of the primary and subcenters were operating at 90

percent capacity and another 35 centers were working at 70-89 percent capacity. The evaluation team's analysis does not support such high utilization in the 17 primary centers.⁶

Table 2 presents the installed capacity and achieved utilization for NFPAs in the 17 primary centers. The highest average utilization or the highest utilization achieved during the last 12 months for which data were available was 86 percent, in Giza. Whereas 7 primary centers achieved an average utilization of 50 percent or over, 10 primary centers were below 50 percent. Four of the 17 primary centers averaged under 30 percent capacity for NFPAs. In 11 of the 17, utilization from November 1991 to October 1992 was lower than their average since opening. The notable exception was Sohag which had an average utilization of 43 percent and an overall utilization of 57 percent for the last 12 months.

CSI assumed that utilization would build gradually. A steady, gradual build-up did not occur, however. As the graphs in Appendix C indicate, most primary centers reached the maximum number of NFPAs within about a year of opening; the trend for individual clinics after that point has either leveled off or declined.

CSI has defined 34 centers, including the primary centers in Fayum, Minia, and Kafr El-Sheikh, as "low performing"; that is, they are meeting less than 50 percent of the expected "caseload capacity." CSI plans to relocate these centers, along with 27 subcenters⁷. In fact, 9 of the 17 primary centers have had an average NFA utilization below 50 percent.

Although the immediate response to the opening of almost all clinics was quite positive, in general, the number of NFPAs on a clinic basis has declined from the first year of their opening. Although the trend is very similar in both Upper and Lower Egypt, there are some differences.

Upper Egypt: Figure 1 (see figures showing clinic utilization on pages 13-17) presents the opening of eight primary centers in Upper Egypt, in three phases, from late 1988 to July 1990 and the total number of NFPAs per workday as those centers were opened. Peak numbers (a combined total of 70 NFPAs in eight centers) were achieved in mid 1991.⁸

⁶Achievement Reports, the Self-Financing Framework, and CSI clinic staff indicated that CSI clinics are open, staffed, and providing services 300 days a year, seven hours a day. The capacity for service is great. A full accounting of CSI capacity for NFA, given its stated service mix, would be 300 days multiplied by 130 exam rooms multiplied by 7 NFPAs a day. The total would be 273,000 family planning clients a year. For this evaluation, the team accepted CSI's capacity estimation of 240,000 (based upon only 276 days a year because of underutilization during Ramadan and 128 exam rooms) although this seemed to underestimate real capacity. CSI has since stated its capacity is still lower (192,000 based upon 250 days times 128 exam rooms times 6 NFPAs). The 192,000 figure was established by CSI "after again analyzing average performance of all centers from date of opening and confirming that the 7 NFA daily target was not realistic and the income potential based on those targets would not be achieved." In so doing, CSI has confused different management tasks; establishing capacity, assessing utilization, setting targets, and estimating revenues. Capacity is based upon inputs of staff, space, hours, etc.; it is reduced by a reduction in those inputs, not through an assessment of utilization and projection of revenues.

⁷Gharbia (3), Daqalia (?), Alexandria (1), Menoufia (4), Minia (5), Assuit (all 7), Sohag (3), Beni Suef (3), and both subcenters in Fayum.

⁸The peak in May 1991 was due to CSI centers around the country only being open 16 days that month (rather than 24-26), although they saw about the same number of clients as they did in other months. The average NFA per workday is therefore much higher.

Table 2

CSI Primary Centers: Installed Capacity and Utilization by New Family Planning Acceptors (NFPA)

Governorate	No. of exam rooms	No. NFPA a day at full capacity	Year clinic opened	Average No. of NFPA a day since opening	Average NFPA utilization since opening	Average No. of NFPA a day, 11/91 to 10/92	Average NFPA utilization, 11/91 to 12/92
Lower Egypt							
Alexandria	2	14	1989	10	71%	6	43%
Beheira	2	14	1990	4	29%	4	29%
Kafr El-Sheikh	2	14	1989	5	36%	3	21%
Daqahlia	2	14	1989	8	57%	6	43%
Damietta	2	14	1990	7	50%	6	43%
Gharbia	3	21	1989	12	57%	12	57%
Menoufia	2	14	1990	4	29%	3	21%
Sharqia	2	14	1989	9	64%	8	57%
Qaliubia	2	14	1989	7	50%	7	50%
Upper Egypt							
Giza	1	7	1988	6	86%	6	86%
Fayum	2	14	1990	3	21%	2	14%
Beni Suef	2	14	1989	5	36%	4	29%
Minia	2	14	1988	4	29%	3	21%
Assiut	2	14	1988	6	43%	5	36%
Sohag	3	21	1988	9	43%	8	57%
Qena	2	14	1989	8	57%	8	57%
Aswan	2	14	1990	5	36%	4	29%

Source: Evaluation team's analysis of CSI Clinic Achievement Reports

The trend, as Figure 1 indicates, is downward from that point. Figure 2 presents the average number of NFPAs per center per workday per month. Fourteen NFPAs are plotted on the y-axis to illustrate the projected maximum number of clients possible in a two-examination-room clinic (a number of CSI primary centers have three examination rooms) versus the actual number of new acceptors.

An analysis of the individual primary center statistics showed that some clinics did much better than others. The primary center in Qena, opened in 1989, has been the most successful in Upper Egypt; it has two examination rooms, has averaged seven new acceptors per workday, and has operated at 50 percent NFPA capacity. Sohag, with three examination rooms, has averaged nine new acceptors per workday since it opened. Giza and Assuit have averaged six new acceptors. Sohag, Giza, and Assuit all opened in late 1988 and have operated at an average capacity of 43 percent since they opened. Minia, opened at the same time, has averaged only four NFPA's a day, operating at 29 percent NFPA capacity. Fayum and Aswan, opened in 1990, have seen an average, respectively, of only two and three NFPA's per workday since they opened (operating, respectively, at 14 percent and 21 percent new acceptor capacity). Beni Suef, opened in 1990, has seen an average of four NFPA per workday. In all clinics regardless of the phase in which they opened, there has been a decline in new acceptors per clinic workday since June 1991, except for a rise in October 1991, since which time the trend is downward.

Lower Egypt: Figure 3 presents the opening of primary centers in Lower Egypt in 1989 and 1990 and the total number of NFPA's per workday as those centers were opened. Peak numbers (a combined total of over 90 new family planning acceptors in nine centers) was reached in mid-1991. The trend, as Figure 3 indicates, is downward from that point.

Figure 4 presents the average number of new acceptors per workday per center. In contrast to Figure 3, which shows overall growth until mid-1991 due to the opening of additional clinics, Figure 4, which compensates for the number of clinics, shows an earlier downward trend.

As in Upper Egypt, some clinics performed better than others. Gharbia, Sharqia, and Daqahlia, averaging, respectively, 12, 9, and 8 new acceptors per workday, all have operated at over 50 percent NFPA capacity since they opened. Sharqia, with an average of nine new family planning acceptors a day in two examination rooms, was utilized most fully by NFPA's — at 64 percent. Beheira, Menoufia, and Kafr El-Sheikh, on the other hand, averaged, respectively, only 4, 4, and 5 NFPA per workday.

Gharbia, Alexandria, Damietta, and Daqahlia started out more fully utilized than these averages, with 16-20 NFPA's per workday, several months after opening. They were not able to maintain that early momentum, however, and the trend is downward after the first six to nine months both for those clinics which opened in 1989 (Gharbia, Daqahlia, and Alexandria) and in 1990 (Damietta).

Comparison of CSI performance in Upper and Lower Egypt: Figure 5 compares, for Upper and Lower Egypt, the average NFPA's per workday per center for 1989-1992. The trend is similar except for the significant growth in Lower Egypt in late 1989 due to an early positive response to the clinics in Gharbia, Alexandria, and Daqahlia. The early response in Upper Egypt was lower; the relative decline has consequently been less. As Figure 5 illustrates, average numbers of NFPA's per workday per center have been consistently lower in Upper Egypt.

The decline was most significant in 1992. In that year, the number of NFPA's in the 17 primary centers was only 71 percent of the number the year before. See again Table 1 which presents NFPA's in the 17 primary centers from 1988-1992.

Possible explanations for the low utilization and the declining number of new acceptors are many and fall into two related categories: the market and management.

Market Factors: All of the classical demand factors might explain the declining CSI numbers. That is, perhaps the size of the population served is too small resulting in an early market saturation; or perhaps CSI's prices are too high relative to the price of its competitors; or perhaps CSI's prices are too high for the average household income; or perhaps CSI's services do not suit the tastes and preferences, at the given price and in the given circumstances, of Egyptian couples; or perhaps CSI's services are in a poor location.

It is also possible that the market of current users of long-lasting methods is saturated. The IUD, an excellent long-lasting contraceptive, is the method of choice for a majority of CSI clients; towns with a relatively small number of women likely to be CSI clients could be experiencing early IUD market saturation and thereafter declining numbers of new clients. At the same time, it should be kept in mind that there is a large unmet demand in Upper Egypt among women who have never used family planning (see Section 7). CSI, however, has not targeted this market in any special way.

Management Factors: CSI staff pointed out that CSI went through some traumatic institutional struggles in early 1992 which affected CSI management and morale. In February 1992, changes in the CSI Executive Committee led to CSI's not cashing any checks for several months; and in May 1992, USAID cut off funding to CSI for six months. Although such difficulties would certainly have a negative effect on CSI performance, the demand factors cited above account in large part for the declining acceptor numbers. Even with CSI's not cashing checks in February and March, the clinics were open and fully staffed and equipped during that time. As Figures 1-5 (and those in Appendix C) demonstrate, the decline in numbers of NFPA's began in mid-1991.

Most likely, both market and management factors account for CSI's performance. The role of management, however, is to lead and direct performance in changing markets. At this point, a careful and professional market analysis is essential to the sustainability of CSI.

Figure 1

Upper Egypt CSI Primary Centers:
Total NFPA per Workday, by Month, 1989-92

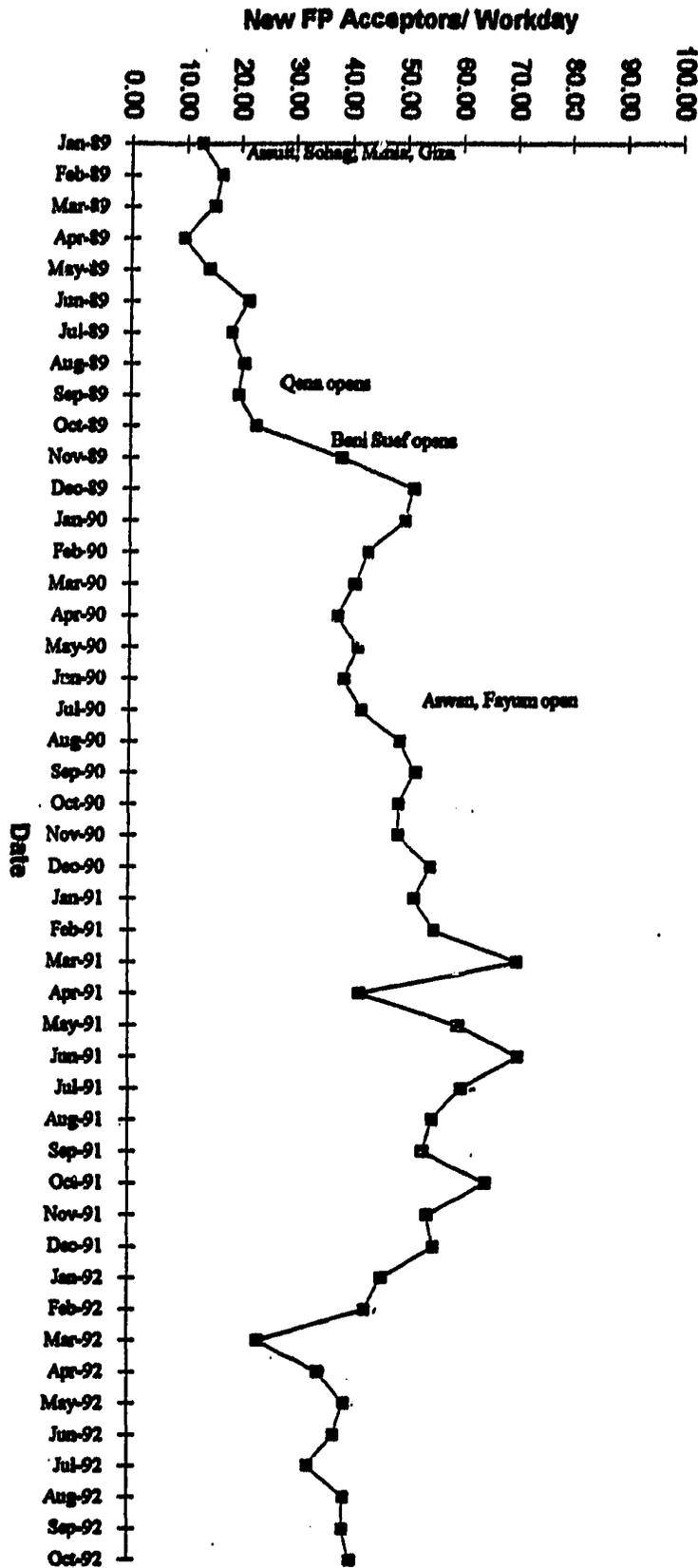


Figure 2

Upper Egypt: Average NFPA per CSI Primary Center, per Workday, per Month, 1989-92

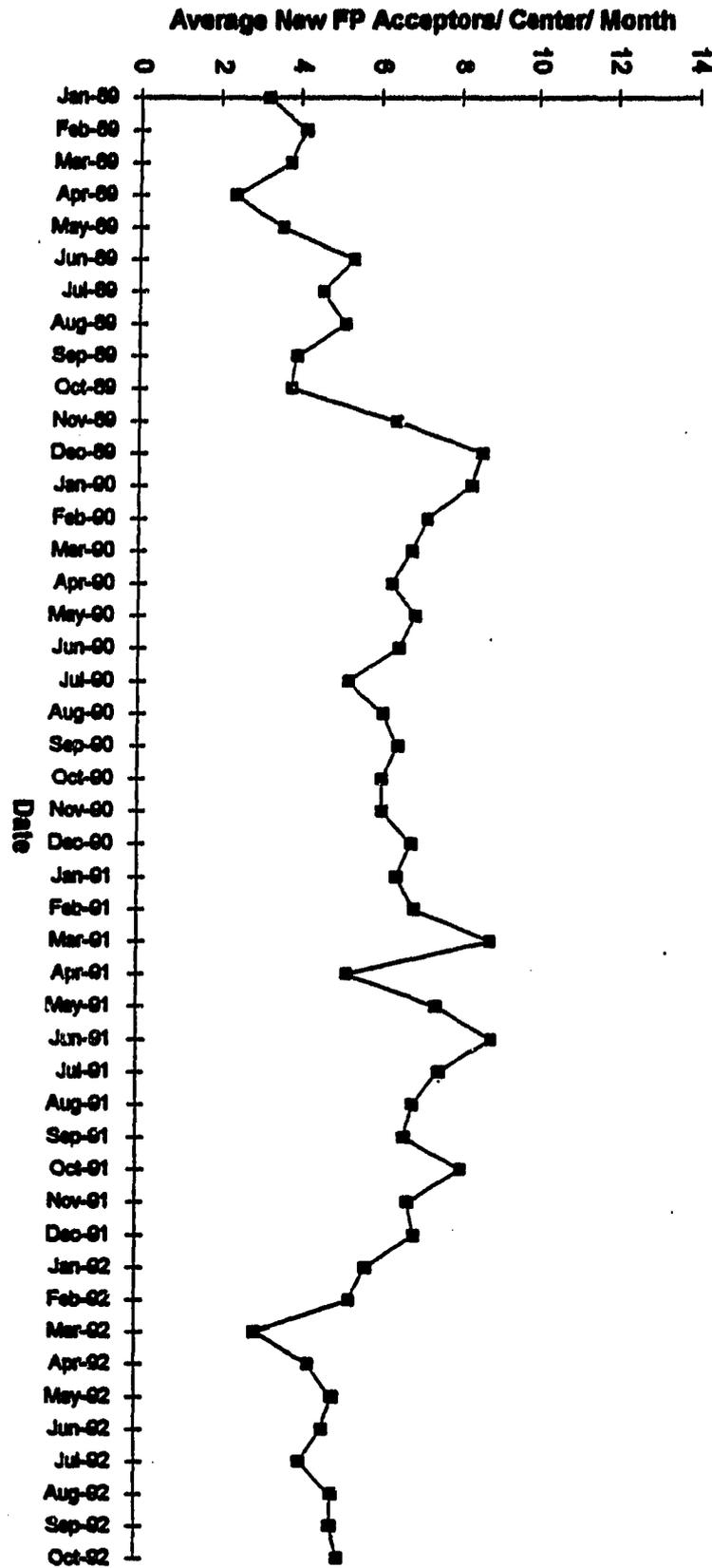


Figure 3
Lower Egypt: CSI Total NFPA
per Workday, by Month, 1989-92.

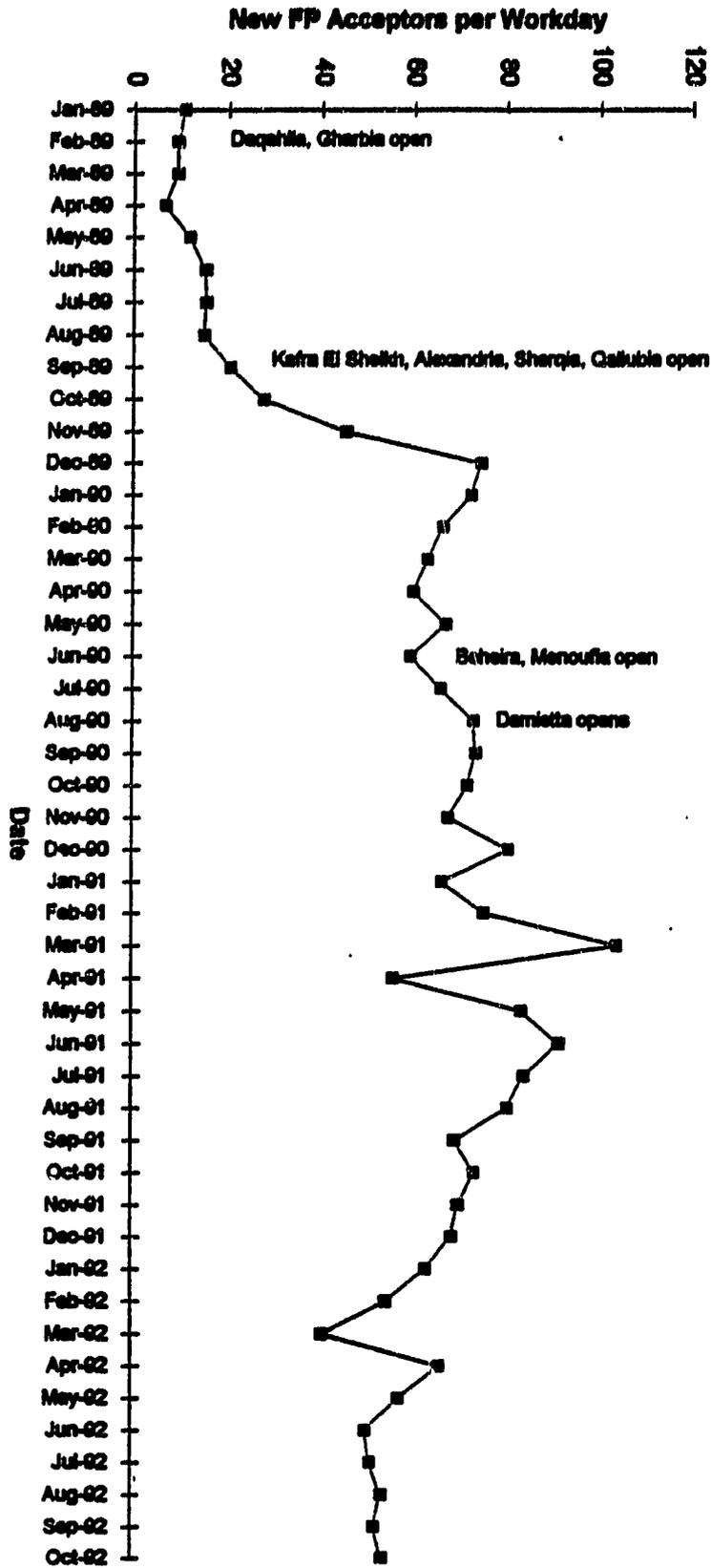


Figure 4
Lower Egypt CSI Primary Centers: Average NFPA
per Workday, per Center, 1989-92

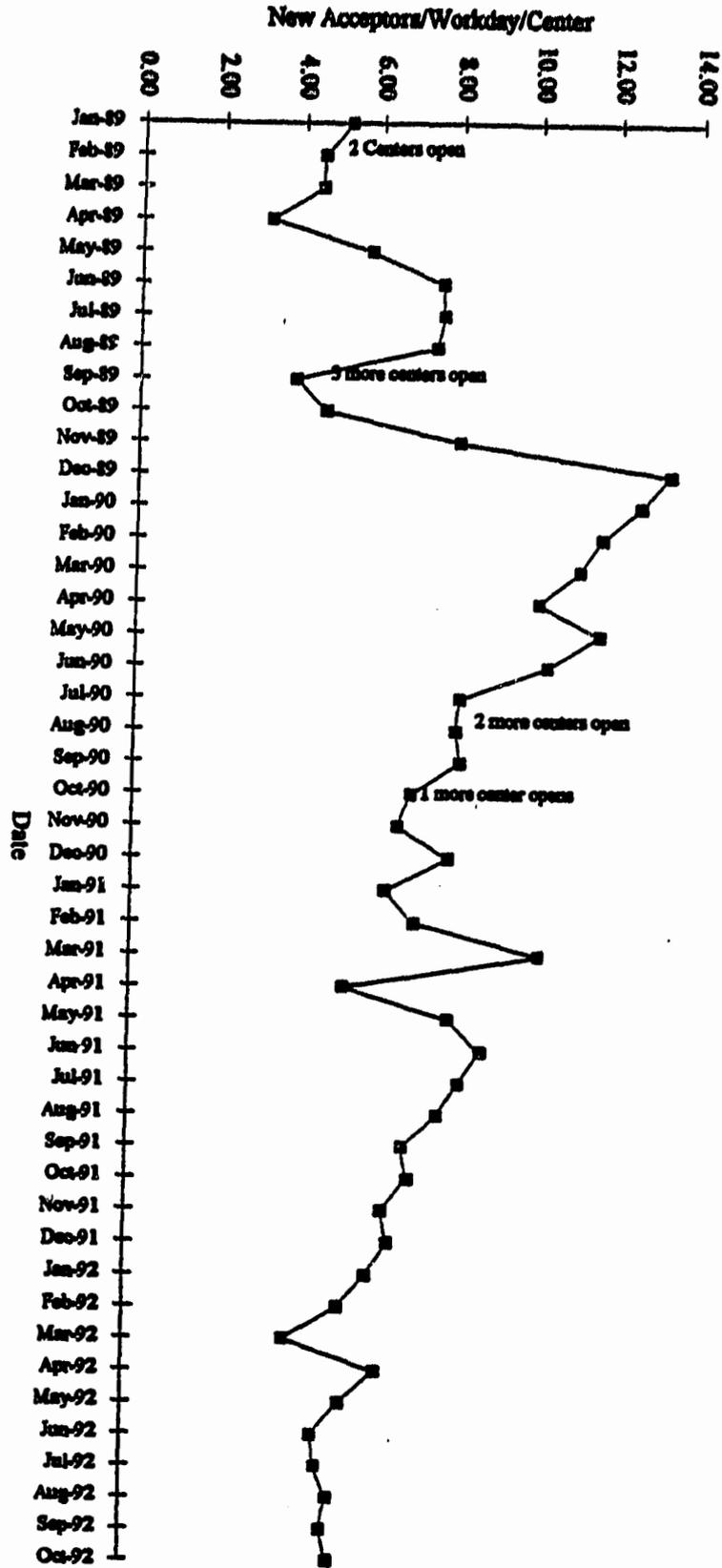
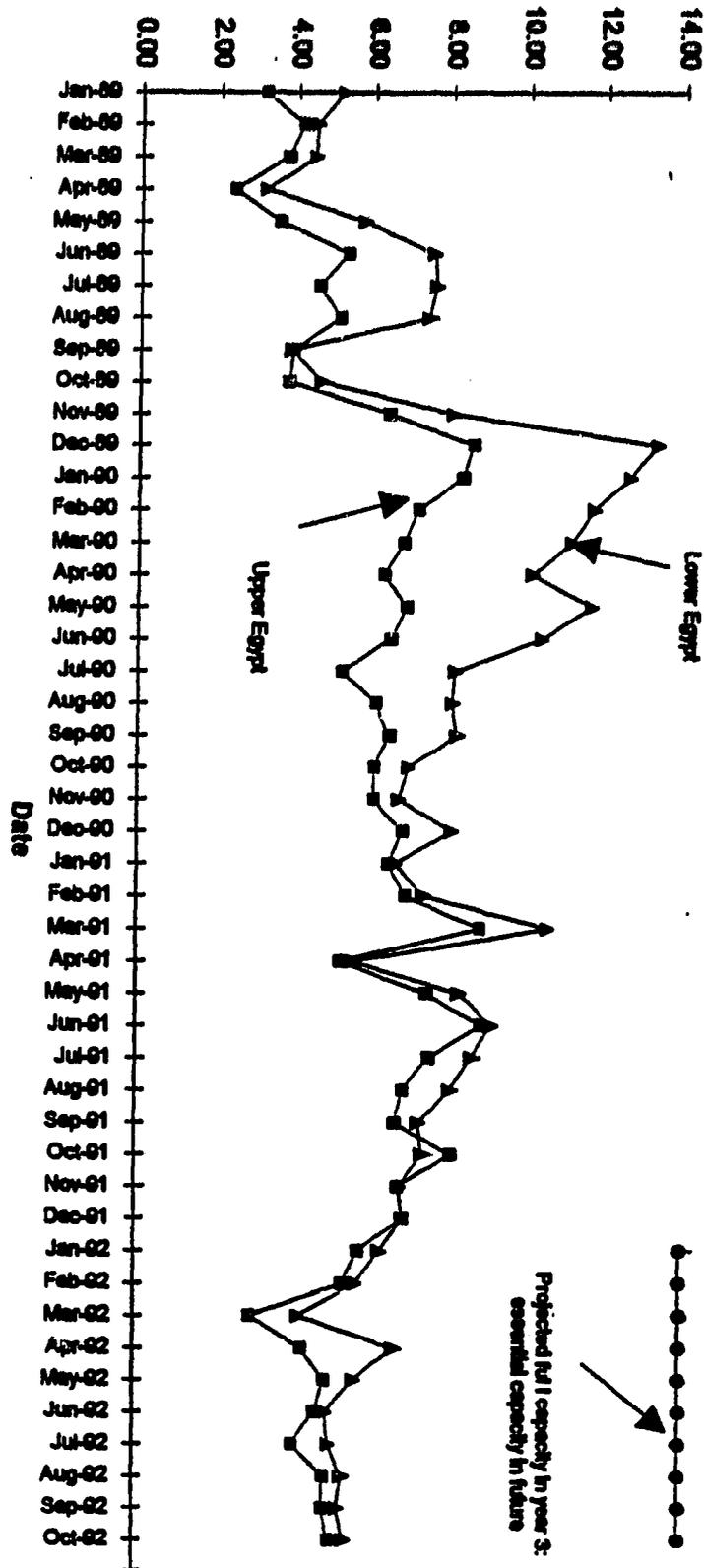


Figure 5
CSI Primary Centers in Upper and Lower Egypt:
Actual Average NFPA per Center per Workday per Month,
1989-92, versus Projected Full Capacity
New FP Acceptors/Workday/Center



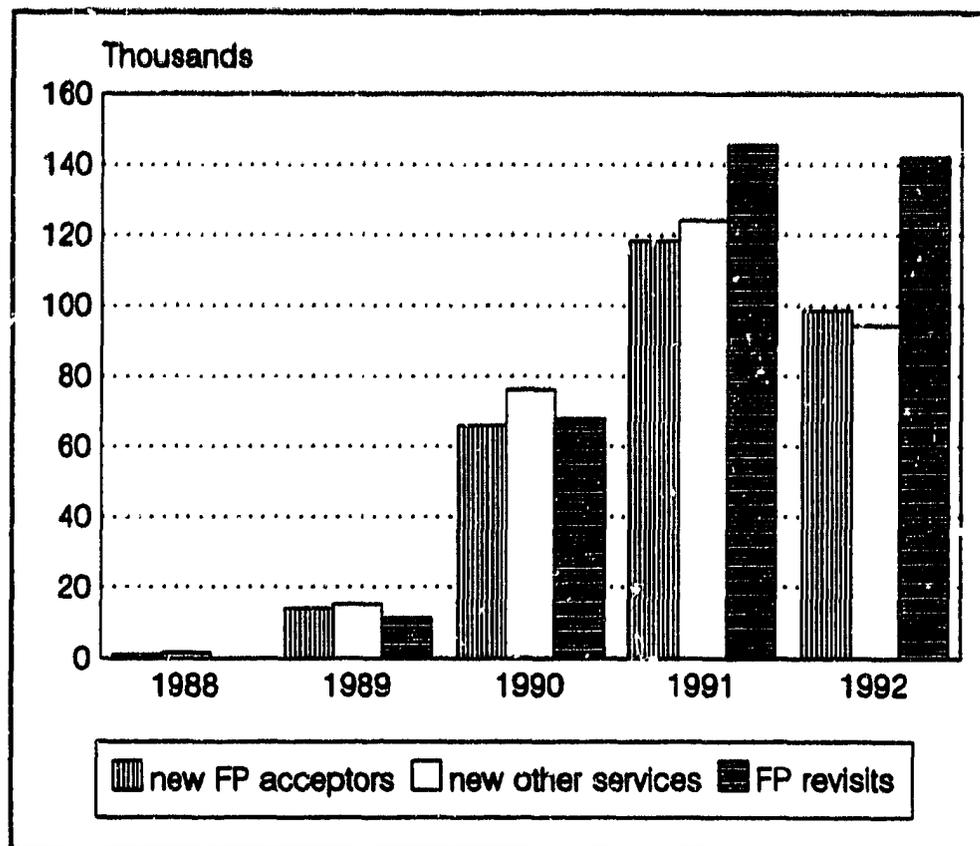
2.5

Other Services

The project design planned a 1:1 ratio between NFPA's and "other services" clients. In every year but 1992, the number of new other services exceeded that of NFPA; in 1992, the number of NFPA was 83 percent of the previous year while the number of new other services clients was 76 percent of the previous year. Figure 6 presents these trends.

Figure 6

Numbers of CSI NFPA, New Other Services and FP Revisits



Source: CSI

"Other services" include services for pregnant and postpartal women, infertility, and basic gynecology. Such services are important to CSI; they are believed to be potentially an important source of income generation. Much of the sophisticated clinic equipment is on hand to attract patients for these services.

CSI would also like to offer infant and child health care services; indeed, some CSI doctors volunteered that occasionally they informally provide immunizations for infants by bringing in their own vaccines. CSI, however, is not licensed under the Ministry of Health as a health center, rather it is licensed by the Ministry of Social Affairs as a family planning PVO. As such, it does not have the license to provide child health services. Although the idea of "well-baby" or child health care services is a tempting solution to CSI clinic underutilization and revenue problems, a number of issues

need to be carefully examined before CSI informally eases into such services. First and foremost is whether CSI has the legal authority to do so. In addition, CSI needs to analyze 1) the market for such services — both the demand for additional child health care providers and the current supply of such providers; 2) CSI's competitive advantage in such a market; 3) the profitability of such services; and 4) the positive and negative (if any) effects of offering infant/child health care upon the primary CSI mission of family planning.

3. Outreach and IEC

The outreach effort that characterized the early days of the project was thorough, with local assistants in each area canvassing door to door for potential clients, then turning over the neighborhood surveys to primary center and subcenter outreach directors, who in turn assigned home visits to the centers' outreach workers. In Alexandria's primary center, it was reported that every eligible woman has had two or three home visits informing them about CSI's services. The outreach effort in Alexandria, however, was thought to have outlived its usefulness and to have become counterproductive, and has thus been phased out. This is not the case in other governorates, where outreach is still estimated to bring in 50-90 percent of new acceptors.

Although this effort has been executed on a grand scale, there seems to be an overabundance of staff assigned to outreach. Some very low-volume subcenters had both an outreach director and an outreach worker performing functions that could have been handled by one person. The outreach workers, usually females, reported feeling over-supervised by their male directors, whose role seemed to be largely setting out the daily workplan for the workers. Some of the male outreach directors hold informational meetings with the men in their area, going to schools, factories, government buildings, and talking with individual men whose wives have had difficulty convincing them that family planning would be advisable. In some small subcenters, the only outreach person was a male, which seriously limits the role to manning the microphone truck and meeting with men, as it is not acceptable for a man to talk about family planning with women, nor to visit them at home just to inform them about the CSI service.

Microphone-equipped vehicles are available in each governorate, but are not always used in the outreach effort. In Fayum, for example, where service volume is very low, the microphone truck has reportedly not been used for over a year.

IEC materials are plentiful in the project, with video tapes present in almost every clinic, printed pamphlets and picture books, color-coded information/instruction sheets about each method, and appointment cards with side effects and instructions about the specific method selected by the individual woman. Counselors are equipped with hand-held anatomical models on which to demonstrate the female reproductive system, as well as the insertion of the IUD.

There was an intensive mass media campaign when the project began, but no advertising of this type has occurred recently. IEC directors reported that their role was only to present CSI as a site at which to receive family planning services; education about family planning, its health benefits and methods was reported to be the role of the State Information Service. Recent technical assistance to CSI in marketing supported the CSI role as a promoter of CSI rather than of family planning.

Inquiries about the messages given to women in the outreach process led to descriptions of the ways in which CSI is "better, safer, provides more thorough services" than other programs, implying that the other programs are less safe and thorough. An outreach worker in Upper Egypt related (as translated by the project's director of IEC) that sometimes fear is used to motivate a woman to come to CSI, with the staff implying that some personal attribute of that woman (e.g., lined face, tiredness) may be caused by using the wrong pill or other method, and that laboratory tests should be performed to be sure of the proper method. The IEC director concurred that "fear" is sometimes used to motivate women to come to CSI. This approach is clearly misguided. The use of fear is an unprofessional, unethical, and unacceptable way to convince women to use the services and can serve

to create medical barriers to family planning rather than to promote greater acceptance and use of the program as a whole.

4. Quality of Care

Quality of care is here discussed in relation to 1) clients' choice of methods, 2) technical competence of providers, 3) information provided, 4) interpersonal relationships, 5) continuity of family planning use, and 6) constellation of services.⁹ Chapter 6 presents conclusions on safety, effectiveness, efficiency, replicability, and cost.

4.1 Choice of Methods

There is little variation in how methods are presented to clients from clinic to clinic, and all clinics have available the basic menu of methods — IUDs, pills, barrier methods, as well as injectables. None of the clinics reported stock-outs of any methods. Interviews with physicians, nurses, and counselors made it clear that their bias is toward long-term effective methods (IUDs or injectables); they are less likely to recommend pills, except for short-term child spacing, and unlikely to recommend barrier methods or spermicides. All, however, reported that they demonstrate or describe the full menu of methods to clients; and most providers are committed to assisting the client to choose her own best method. A few providers seemed quite committed to the method of their choice and are willing to try hard to convince a client to "choose" a more highly effective method. Women in group interviews in Fayum and Alexandria inquired about the unavailability of Norplant and expressed a wish that it be made available to them.

CSI's demonstration of the successful and uncomplicated provision of injectable hormonal contraceptives by general practitioners has set a valuable example in Egypt.

4.2 Technical Competence of Providers

Out of a desire to not intrude on clients by observing the physicians and nurses as they provided services, the assessment of technical competence was inferred from answers to questions obtained in interviews. With some variation based on personal preferences and beliefs, the responses to these questions by physicians, counselors, outreach workers, and nurses indicated excellent understanding of the indications and contraindications for specific methods. Questions were asked about which contraceptive methods should/could be used in particular situations, aseptic technique used in performing procedures, sterilization of instruments, and content of counseling sessions. All physicians described the "no-touch technique" of loading the IUD inserter as their method of operation, all nurses described the accepted techniques for cleaning and sterilizing instruments, and all counselors described a complete counseling session. Physicians generally reported that IUD-related infections derived from insertion by providers in other programs, and that information on infection rates could only have been obtained by reviewing individual records.

Several of the nurses were also midwives, and several had been providing family planning services prior to joining the project, as had several of the physicians. Several of the nurses had also worked in other countries and had therefore been exposed to practices in different cultures. All but three of the providers interviewed had participated in the CSI training program and had received training

⁹Based on Bruce, Judith. *Fundamental Elements of the Quality of Care: A Simple Framework*. The Population Council, 1989.

through the Regional Center for Training and in-house CSI training. One was a physician's assistant who had replaced a nurse and was limited in her tasks to assisting the physician in the examining room and sterilizing equipment, which she had learned from the physician. All of the physicians reported that they had received the *CSI Family Planning Clinical Guidelines*, and some of them had the books in their offices. Most of the nurses, outreach workers, and counselors had also received the books, and most had them in the office. All reported that they used them as reference books and found them helpful. The nurse who had not attended the training did not have a copy, as her two predecessors had taken theirs with them.

The very differentiated roles of outreach worker, counselor, nurse, and physician lead each to hold a rather narrow, task-oriented work focus. Nurses appear to be underutilized in this array of job assignments, particularly given the experience of many nurses in this program. For example, one in Fayoum is a midwife who was trained at Ain Shams University to insert IUDs after returning from work abroad where she had several family planning courses; another in Gharbia is a midwife who worked in Saudi Arabia and Libya in family planning for 10 years. They provide informal counseling, reassurance to clients, group meetings in the waiting room, and take phone calls from clients in addition to assisting the physician in the examining room and cleaning instruments, which makes them very versatile team members.

A series of questions related to the quality of counseling. Most of the counseling took place within 15-20 minutes, with occasional reports of more lengthy sessions, and several reports of 5-10 minute counseling sessions. Counselors reported that better-educated clients required less time, and those who were less well educated took more time (up to the 15-20 minute range). Although counseling sessions may be a bit brief, the prior contact most women have had with an outreach worker probably begins to build a sense of trust with the project as a whole.

4.3 Information Provided

Counselors, physicians, and nurses (to a limited extent) are the clients' source of information about family planning. Counselors provide the first real clinical information, as the outreach workers only show samples and encourage the women to come to the clinic. They use samples to demonstrate and demystify each method, and sometimes use picture books and pamphlets with narrative descriptions of the methods. The counselors generally describe the method, talk about and/or demonstrate how it is used, discuss side effects and what to do about them, and make it clear that if the chosen method is not satisfactory, the client should return to the clinic and change to a different method. Most of the counselors and nurses were asked to describe what they tell a woman about oral contraceptives; the descriptions were clear and accurate and directions were given about how to take the pills and what to do if a pill was forgotten. Having received the basic information about the various methods, the client then talks with the physician about her health and obstetrical history, enabling the physician to ascertain whether any of the methods are medically contraindicated; if so, the physician explains why, and if not, offers the full menu of choices, often with her own bias coloring the descriptions. Once the client has selected and received a method, a return appointment card is given to her; on the back of it is a description of the side effects of her method and their management — the inclusion of this information is an outstanding innovation on CSI's part.

4.4 Interpersonal Relationships

As noted above, the brevity of contact between nurse and client and physician and client may be an indication that interpersonal relationships (defined as the affective content in the interaction between client and provider, respectful two-way exchange, and some identification between client and provider) are less than optimal. Based upon interviews with clients and providers, however, it is clear that clients automatically trust the female physicians in this project, and their presence is the first concern of women as they think about whether to come to CSI. It was clear throughout the country that women want to see a female physician for IUD insertion, and that that is a major determinant of what method they choose and where they receive services.

The project has divided the policy and procedure manuals according to the various roles, so it appears that physicians have had little or no exposure to the techniques of counseling which stress the value of two-way communication and the importance of the provider's understanding of the client's life circumstances. The counselor's manual, or at least the training course, apparently did contain this emphasis, as most counselors described their session as beginning with some "ice-breaking" questions about their lives to put the client at ease. The nurse then talked about "preparing the client" to talk with the physician. Most physicians spoke only of the technical aspect of their conversations with the clients.

4.5 Continuity and Follow-Up

Although no one described a formal policy about tracking clients or following up on those who drop out of clinics, many outreach workers and counselors seem to take up this role as a matter of course. The vigor with which they pursue "drop-outs" varies from clinic to clinic, with Alexandria sending a letter to the client who misses an appointment, and Sohag, with an outreach worker who "never lets one get away."

Without systematic follow-up mechanisms, there is no way to know why some clients have ceased to use CSI services or whether clients are continuing to use family planning methods. The continued use of a particular clinic for family planning services might be an indication of a satisfied client, and knowing why someone stopped coming to the clinic might provide useful feedback for improvement of services. As workers specifically dedicated to outreach are dropped from the staffing pattern, an important source of informal information is likely to be lost because the new multi-purpose workers will spend most of their time in the clinics. Consequently, these workers will not be picking up informal information in the community to anywhere near the degree the current outreach worker does. In the absence of a formal follow-up mechanism, the project will have lost a large part of the feedback loop from a very important client pool — i.e., those who were not satisfied.

4.6 Constellation of Services

Family planning services are meant to constitute approximately 50 percent of CSI services which also include laboratory services, antenatal and postpartum care, infertility workups and treatment, and treatment of gynecological infections. CSI staff reported some concern that women who receive their antenatal care from CSI must then switch to an obstetrician for delivery, and the obstetrician often recruits the woman to his/her own family planning service. The major concern, however, expressed by staff (primarily physicians) about the family planning service was its high price. One CSI physician

suggested that free care be provided one day per week; another reported that she often buys and brings in vaccines with which to immunize the children who are brought to the clinic (see Section 2.5 with regard to CSI's current legal authority to provide infant and child health care).

4.7 Summary on Quality

The CSI focus on quality has successfully spearheaded a new national emphasis on the quality of family planning services. Staff at USAID, the Ministry of Health, and CSI all commented on the positive effect the high-quality CSI services have had on the rest of the Egyptian family planning program.

5. Sustainability

5.1 Defining Sustainability

Development literature defines PVO sustainability in terms of three interrelated capacities: institutional, managerial, and financial. A sustainable family planning PVO is one which

- has the institutional capacity to fulfill its mission and to provide family planning services on a broad basis over time. It is one whose services are consistently in demand by a clear segment of the family planning market.
- has managerial strategies, structures, and systems to facilitate planning and the identification of appropriate market segments; to deliver high-quality services to these clients; and to monitor, control, evaluate and respond to its own performance and to changes in the family planning environment. It has personnel systems which support and reward high-quality services and the hiring and retention of good staff.
- increases the level of self-financing through the generation of sufficient income to cover the costs of the institution. Self-financing should be understood as a progression from minimal coverage to that which supports sufficient income to permit capital investment.

5.2 Institutional Sustainability

Four related institutional issues affect CSI's sustainability: its mission, its market segment, its marketing, and, most critically, the response to date to its services.

5.2.1 Mission: Project or an Independent Institution

CSI was designed as a project to upgrade the services of the EFPA, rather than as an institution itself. Amendment by amendment and project modification by modification, it has evolved to the point where it is now seeking and expecting permission from MOSA to establish itself as an independent PVO. Although self-financing of family planning activities was an objective from the start, becoming an independent sustainable institution was not. As CSI evolved from its original EFPA objective, a clear institutional mission for CSI as an independent institution was not established. Rather, the focus of CSI attention appears to have been on process, standards, and systems. Management strategies and systems should, however, follow and be designed to accomplish the stated mission. In recent months, as CSI has sought status as an independent institution, it has also sought to clarify its mission. The *Self-Financing Strategic Document* (January 29, 1993) describes CSI seeking to be a model of self-financed clinical services with a strong quality-assurance component.

5.2.2 Market Segment

CSI has had a supply-side approach to the family planning market. The project paper was built upon the assumption that there were Egyptian couples with disposable income who would be willing to pay for high-quality family planning — if those services were supplied. Planning was undertaken on the

basis of total population, institutional distribution throughout the country, and representation in the primary cities of 17 governorates. In addition, subcenters in the governorates were to provide services to towns with a minimum population of 200,000. In the original project design, CSI's market would have been EFPA clients and other women with disposable income who were interested in quality family planning. The demand side of the market was not examined.¹⁰ Secondary data, principally Population Communication Services (PCS) project reports written in 1991 and 1992, describe the design of CSI services as having been based upon results of the 1988 DHS and focus group research. These reports state that CSI concluded on the basis of that data that there was a market for quality family planning services. No nationwide market research was undertaken, however, to determine the size, location, or extent of that potential CSI market, nor how much it would be willing to pay for family planning services.

The thesis that there were women with disposable income who would be willing to pay for high-quality family planning — and that they would come to CSI — was developed when there was little or no competition offering quality family planning services. The services of the MOH were few and of poor quality. Since that time, however, the MOH has both greatly expanded its services and improved those services. CSI is now in a far more competitive market than it was when the project began.

CSI currently states that its market segment is middle class women, with the proviso that if there are insufficient middle class women in an area, CSI will try to attract upper and lower class women. CSI has no data on class or education of its clients, but it does have data on the contraceptive history of its new clients. As Table 3 indicates, 28.6 percent of CSI's new family planning acceptors¹¹ had never used family planning before they came to CSI; 30 percent had used family planning at some point in their lives; and over 41 percent were currently using a method that they had obtained from another provider. If these percentages are applied to the total number of new family planning acceptors that CSI has seen through 1992 (298,091 — see Table 1), CSI has been responsible for approximately 174,681 truly new acceptors.

Day and Evening Clinic Sessions: CSI clinics are open evenings in many urban areas. This is a real competitive advantage for CSI which distinguishes it from public sector providers. In the evenings, its competitors are private sector providers who charge many times CSI's prices. CSI does not have data broken out for evening attendance. It seems, however, that evening clinics are quite well attended in the urban areas and have very low attendance in the rural areas. In an interview with a group of clients one evening in Sohag, the women spoke of working outside the home during the day and the real advantage it was for them to be able to come to CSI after work. Based on this evidence, CSI could benefit from marketing the convenience of evening sessions to urban women otherwise employed during the day.

¹⁰Effective demand, or the quantity of services which women are willing to buy given the price for those services, should have been examined. Economic theory considers the following factors the most important in determining demand: the price of the service, the prices of competing services, average household income, tastes, the distribution of income among households, and the size of the population.

¹¹As noted previously, CSI uses the term "new acceptor" for a first-time client at a specific CSI clinic.

Table 3

CSI New Family Planning Acceptors by Previous Use

New Acceptors' Prior Use	Previous Source of Supply for Users Newly Accepting Services at CSI	Percentage
Never users		28.6
Current users		
	private physicians or hospital	12.7
	public hospital or health unit	5.5
	pharmacy	21.6
	others	1.5
	total current users	41.4
Previous users		30.0
Total		100.0

Source: Table 4 in project modification no. 2

5.2.3 Marketing

Marketing experts speak of the four "Ps" — product, place, price, and promotion — as being the critical components of marketing strategy. CSI does not appear to have a marketing plan which deals with these components in a holistic, strategic way. Such a plan would be dependent upon a market analysis that would divide the family planning market into discrete segments and that would describe and quantify those segments. The plan would describe, for urban and rural Upper and Lower Egypt, the tastes, preferences, and desires of users and non-users; the price of other family planning services; average household income; the distribution of income among households; and the absolute size and geographic location of various income segments. Such market research has not been undertaken. The following discussion describes how CSI has formally addressed the four components of marketing. CSI field staff expressed many concerns about the overall strategy, particularly price and place.

Product (Family Planning Services): As indicated in Section 5.2.2, secondary data (principally PCS reports) describe the design of CSI services as being based on results of the 1988 DHS and on focus group research. These reports state CSI concluded on the basis of that data that there was a market for quality family planning services.

Place: CSI has located primary and secondary centers in cities and towns in 17 governorates on the basis of population size. The centers are located centrally within a specific city or town.

Price: Businesses set prices with many objectives: to cover costs, to attract customers, to beat the competition, to cross-subsidize, etc. CSI's objective appears to be to cover costs to the extent possible. CSI has had a uniform price strategy which has allowed some local project directors to increase prices, but not to decrease them to suit the local market. The basic fee for an IUD in rural

Aswan is the same as it is in middle class Alexandria. Many CSI staff expressed their disagreement with this uniform pricing strategy. This is a valid disagreement. CSI needs to examine its pricing strategy carefully within the total context of its overall marketing strategy. There are many alternatives to a uniform price: prices could be adjusted governorate by governorate, for urban and rural, or for income levels within a community.

Promotion: CSI's principal marketing strategy is promotion: mass media advertising, IEC, and outreach. The PCS project provided technical assistance in September 1992 on the CSI mass marketing strategy and the development of a mass media campaign. As outlined in the consultant trip report, the CSI program appears to be logical and ambitious. The milestones set for development of the mass media campaign included a number of steps leading up to television, radio, and newspaper advertisements that would be run during the period November 1992-January 1993. These advertisements have not yet been run, however.

To develop the messages for the campaign, current users of CSI services were asked by the CSI IEC director what they liked about CSI. This is a legitimate approach, but it does not indicate why persons are not using CSI services or why they are not choosing to use any family planning service. The messages developed will be primarily aimed at generating new CSI users and not necessarily NFPAs, which is the major goal of the CSI project. The requests for proposals that were sent to potential contractors for parts of the media campaign state the following:

CSI has spent tremendous research efforts to understand its typical clients, and by projection, its typical potential clientele. The typical CSI client is an urban, married woman between the ages of 25 and 35 years, who uses or intends to use a modern contraceptive to delay her next birth. She has an average of two to three children. She may not be well informed about modern contraceptives, but she has definitely been exposed to information and rumors about family planning. There is one chance out of two that she cannot read.

This very general profile would probably describe the family planning clients of most services in urban areas. It is not market segmentation. Unless CSI can identify its current and potential clients better than this, it will be forced to continue to plan and implement services and marketing for those services around a very costly hit-or-miss approach based on assumptions and guesses. A new operations research profile of current clients using different services, which is funded by USAID and implemented through the Population Council and local contractors; it will be very useful when it is completed in about a year. The profile is designed to

- ascertain the existing condition of complementarily/ competitiveness of different family planning services,
- provide necessary information to better target family planning services and resource allocation, and
- assist in establishing policies related to cost recovery of family planning services.

The study will not look at the non-users, however, who make up the untapped market that each of the services should be trying to reach. Although the study will be useful, it is not a substitute for market research.

A key strategy of CSI promotion is to sell CSI rather than sell family planning. The CSI marketing director explained that it is the responsibility of the State Information Service to market family planning and CSI's responsibility to market CSI. Recent technical assistance to CSI affirmed this strategy:

Sell the CSI brand . . . not the family planning category. CSI will concentrate all of its advertising efforts on promoting the CSI family planning service centers and building patient traffic; and not on convincing non-predisposed couples to consider family planning. (CSI will rely on the State Information Service and other family planning organizations to continue to build the category of family planning by promoting the concept [and benefits] of family planning and specific contraceptive methods and brands.)¹²

Such a strategy is surprising given that the CSI goal is to recruit new acceptors. Market switching may help CSI reach its targets: it will not help Egypt reach its goal of reducing fertility. CSI would be wise, particularly in Upper Egypt with the large unmet need for family planning, to target non-users as well as current users.

Negative Advertising and Medical Barriers: In addition, some of CSI's marketing messages are negative and create barriers to the national family planning program. In interviews with outreach workers (for which the CSI IEC director served as the translator) and in separate discussions with the IEC director himself, CSI staff described giving the following CSI messages:

- **CSI is cleaner and safer than . . .**
- **CSI offers family planning clients laboratory tests: in order to receive quality family planning services, a woman should first have a laboratory work-up. The CSI brochure states "CSI performs comprehensive laboratory tests to ensure that the client's preferred method is a suitable medical choice."**
- **Staff described using a "little fear" to induce non-CSI users to come to CSI. This has included commenting on a negative aspect of a woman's appearance such as fatigue and suggesting that the fatigue might be due to current improper usage of contraception (because the woman had not had a complete medical examination and laboratory testing at CSI).**

In addition to negative advertising and dissemination of false information that laboratory tests are essential to good family planning, CSI's marketing promotes laboratory work and other services (liver and renal tests, ultrasound) which are not an essential part of quality family planning services and for which the CSI doctors and nurses in sampled clinics indicated there was no referral or treatment system if those tests should indicate a potential medical problem. Clinic staff reported such testing gives the appearance of quality and is used to attract additional clients for revenue generation. In discussions on this finding at the end of the evaluation with the CSI central office staff, CSI staff

¹²Trip Report, IEC Technical Assistance to CSI and the Minia Project, Cairo and Minia, Egypt. Gary Saffitz, for Population Communications Services Project, Johns Hopkins University. October 1992.

adamantly stated that a referral system has been established, but that recent cost-cutting measures had reduced central office supervision of that system as well as other systems.

5.2.4 The Response to CSI Family Planning Services

As indicated in Section 2.4, the immediate response to newly opened CSI family planning services was often quite positive. Overall, however, at the individual clinic level the number of new clients receiving family planning services has declined since mid-1991. Utilization by NFPA's has been below 50 percent in 11 of the 17 primary centers analyzed. CSI needs to undertake a professional market analysis to understand why new clients are not coming to CSI centers as planned. The sustainability of CSI depends upon successful resolution of this question.

5.3 Managerial Sustainability

CSI has put a lot of time and attention into management strategies, systems, management development, handsomely appointed executive offices, and the recruitment of management staff.

5.3.1 Planning

CSI has a highly developed planning system, supported by an excellent management information system on CSI performance. At each level in the CSI structure, there is information on services, costs, and revenues. Targets are set and revised. The recent *Self-Financing Strategic Framework* document is a precisely detailed document with projected caseloads, revenues, and costs for the remainder of the project.

5.3.2 Supervision

Initially, CSI appears to have had a highly effective supervisory system from the central office which involved the directors of medicine, finance, promotion, and the CSI director making monthly visits to each governorate. In addition, the governorate-level family planning directors met with the CSI director in Cairo once a month. For the past year, however, supervisory visits to the governorates have been abandoned. CSI stated that they would be resumed after new money is available from USAID.

At the governorate level, supervision, particularly by the governorate medical director, seems to have continued more smoothly. This is vital to quality assurance since the turnover of physicians is high in many CSI units. The efforts of the medical director in Beni Suef were impressive, and those of the governorate medical director in Sohag were particularly outstanding.

To control costs, CSI has undertaken a major restructuring and restaffing of the institution, at the governorate and service delivery levels. (No reduction is under way in the central office, however; in fact, CSI is proposing increasing the Cairo central office staff by two persons.) Job descriptions have been rewritten; certain staff are being reduced. An important component of the reorganization is reducing the number of outreach workers by half. If this plan is carried out, recruitment efforts will be curtailed. Heavy emphasis now seems to be placed on the proposed mass media campaign and word-of-mouth advertising; i.e., satisfied clients passing along information about CSI services and encouraging friends to visit the CSI clinics. That strategy coupled with a vigorous outreach program, however, has not been able to bring any of the CSI centers to full capacity over the past four years.

CSI's self-financing strategic framework is predicated on full capacity for each of the 128 examination rooms during the next four years. Thus, securing new clients must be a priority.

5.3.3 Financial Systems

Financial systems, including cost accounting, are highly developed. CSI produces monthly spreadsheets reporting on clinic activity in great detail: numbers of clients, method mix, income, and expenditures. The systems are sophisticated and enable careful monitoring and control at the clinic, governorate, and central level.

5.4 Financial Sustainability

No developing country PVO whose primary mission is family planning has been able to generate sufficient income from services and products to cover all its costs. Even PROFAMILIA in Colombia, a highly sophisticated, competent 30-year old institution in a middle-income country, is only able to generate income sufficient for about 70 percent of its costs. The question, therefore, with regard to financial sustainability is not whether CSI is able to generate income to cover all its costs, but at what level it is covering costs and what self-financing trends are apparent.

5.4.1 Self-Financing

Project Design and Modifications: Self-sufficiency or self-financing has been a key feature of the CSI project. The development of a fee-for-service system to provide for self-sufficiency was listed as one of the major outputs of the project in the project paper, and self-sufficiency has been a consistent goal in each of the subsequent project modifications. In the second modification document, CSI defines itself as seeking to be a self-financing model for private sector family planning in Egypt.

The CSI project was planned in 1987 to be a five-and-a-half-year \$16.7 million project. USAID was to provide \$7.7 million (LE 16.8 million at the exchange rate of \$1.00 = LE 2.17) over the life of the project, with MOSA providing \$.978 million, and EFPA providing in-kind support valued at \$.373 million. It was estimated that through fees charged to clients the project would generate \$8.5 million, of which \$7.6 million would be used to support the project with the remaining \$.981 million being held in reserve to fund ongoing activities after year five. These revenues were to be earned through 258 high-quality family planning clinics, which by the end of the fifth year would have attracted approximately 1,664,160 NFPAs paying between LE 7.4 and LE 13.4 for their first visits, including a routine laboratory test.

The first modification extended the start-up period from 6 to 14 months and reduced the implementation period from 5.5 to 4.5 years. It also reduced the total number of CSI centers from 258 to 158 and the target for NFPAs from approximately 1,664,160 to 867,000. In December 1992, the second modification further reduced the number of clinics to 112 and the target for NFPAs to 369,000 new other service clients and 686,000 revisitors. The total budget for this re-sized project was set at LE 32,935,814 (\$ 9,920,426 at the exchange rate of \$1.00 = LE 3.32), of which USAID is to contribute LE 26,534,092 (\$7,992,196). Revenues from fees charged to clients were projected to be LE 7,003,536, of which LE 4,163,102 (\$1,253,946) are to be used to support the project and LE 2,840,444 are to be held in reserve to fund future activities. A portion of client fees are derived from the sale of A.I.D.-donated contraceptives which are provided free to the project.

Revenues: During the calendar years 1987-88, 1989, 1990, and 1991, USAID contributions totaled LE 23,219,485 and covered over 90 percent of the CSI costs, including LE 6,584,784 in capital goods and over LE 959,557 in contraceptives. Table 4 shows CSI revenues by funding source.

In May 1992 USAID, prompted by concern over the collapse of CSI central management, suspended payments to CSI for six months. During the period May-November 1992, CSI operated using revenues earned from client fees and some of the revenues held in reserve from previous years. Despite the suspension of payments, USAID contributions covered more than 60 percent of CSI costs during 1992. CSI was able to continue operating during the six-month period when USAID payments were suspended; however, the project currently cannot generate sufficient revenues to cover operating costs. Although efforts have been made to cut personnel costs, which have accounted for approximately 36 percent of total annual project operating costs, the cost of personnel each year has consistently exceeded the revenues generated by client fees. While cost cutting in other areas such as supplies and capital cost/renovation is also being considered by CSI, given the number of clinics, the extent of its operations, the high-cost items it now has and will need to maintain and replace, CSI cannot continue to operate as presently configured without donor assistance to cover even basic operating costs. Table 5 presents the CSI cost structure with actual and projected expenditures over the life of the project.

Self-financing is defined by CSI as the ability to cover operating costs through client revenue and other sources of funding. In 1990, USAID informed CSI it would continue funding through June 1997. It is anticipated, however, that over the period 1993-97 USAID support will decline, necessitating either larger contributions from other donors or self-financing by CSI. As indicated earlier, in order to prepare for the decline in USAID support, CSI has prepared a *Self-Financing Strategic Framework* document and will be developing a self-financing strategic plan during the first five months of 1993. The objective of the self-financing plan will be to decrease CSI dependence on USAID contributions during the period 1993-97 and become self-financed after 1997. Although it is assumed that the funds from USAID will decrease each year over the next four-year period, it is also assumed that A.I.D. will continue to donate contraceptives. A.I.D./Washington has also provided support through Pathfinder and PCS; this support may or may not continue.

CSI also receives MOSA support and uses the funds for rent, IEC, supplies, travel and per diem, capital expenditures, contraceptives, and training. It is unclear whether this support will continue if CSI becomes an independent non-profit organization.

Table 4

**CSI Budget by Revenue Sources in LE Income, 1987-1991 and Projected Income 1/92-5/93
and**

Use of CSI Service Fee Revenue Account, Actual 1987-1991 and Projected 1992-1993

Revenue Source	Actual				Projected		Total
	10/87-12/31/88	CY 1989	CY 1990	CY 1991	CY 1992	1/1-5/31/93	
USAID (see note 1)	1,067,515	3,285,599	7,142,399	7,739,016	3,984,956	3,314,607	26,534,092
MOSA	0	140,811	506,671	715,231	102,287	658,000	2,123,000
PCS	48,300	47,840	0	0	0		96,140
Revenue Loan	11,532	53,511	4,437	0	0	0	69,480
Service Fees		3,140	65,241	1,030,041	2,649,426	415,254	4,163,102
Total	1,127,347	3,530,901	7,718,748	9,484,288	6,736,669	4,387,861	32,985,814
Use of CSI Service Fee Revenue Account Actual 1987-1991 and Projected 1992-1993							
Use	Actual				Projected		Total
	12/31/89	CY 1989	CY 1990	CY 1991	CY 1992	5/31/93	
For CSI budget	0	3,140	65,241	1,030,041	2,649,426	415,254	4,163,102
Into revenue account	15,206	214,486	1,045,394	1,252,601	-372,578	685,335	2,840,444
Total	15,206	217,626	1,110,635	2,282,642	2,276,848	1,100,589	7,003,546
Revenue Account Balance	15,206	229,692	1,275,086	2,527,687	2,155,109	2,840,444	

- Notes: 1. In addition to local currency support, the project receives A.I.D.-donated contraceptives free of charge and then sells them, thereby generating profit. See note 2 below on client fees which include a commodity fee as well as service fee income.
2. The projected service fees for 1992 were based on an estimate of 234,888 FP and other services clients paying LE 9.36 each. The actual client caseload was 193,042 clients; actual 1992 revenues, at LE 9.36 per visit, would be about LE 1,800,000, rather than the LE 2,649,426 projected by CSI.

Source: Project modification document no. 2, 12/9/92.

Table 5

CSI Cost Line Items: Actual LE Expenditures, 1987-1991 and Projected 1/1/92-5/31/93

Line Items	Actual				Projected		Total
	10/87-12/31/88	CY 1989	CY 1990	CY 1991	CY 1992	1/1-5/31/93	
Personnel	227,805	816,719	2,192,595	3,383,379	3,152,014	1,470,759	11,243,271
Incentives	0	25,790	175,272	382,505	389,753	196,701	1,170,021
Travel	32,447	123,967	360,040	571,774	279,594	333,872	1,701,694
Rent	82,976	187,344	667,386	516,507	434,586	244,530	2,133,329
Supplies	57,139	269,121	895,602	1,397,828	848,561	769,727	4,237,978
Local consultants	10,320	20,279	39,894	52,216	50,474	79,050	252,233
IEC	194,706	377,489	747,709	770,526	675,874	357,048	3,123,352
Training	120,258	172,978	168,193	107,620	47,244	236,032	852,325
Capital	356,696	1,366,074	2,241,337	1,754,612	492,385	358,292	6,569,396
Renovation	45,000	168,000	199,500	361,524	200,620	191,850	1,166,494
Contra-ceptives (see note)	0	3,140	31,220	185,797	165,591	150,000	535,748
Total	1,127,347	3,530,901	7,718,748	9,484,288	6,736,696	4,387,861	32,985,841

Note: In addition, CSI receives IUDs and condoms from the Egyptian Pharmaceutical Trading Corporation free of charge and pays very nominal fees for packaging for the Contraceptive Social Marketing Project's A.I.D.-donated products (Tops condoms and Normineat pills).

Source: Project modification no. 2, 12/9/92

As it presently operates, CSI must have donor support to cover its capital costs and a majority of its operating costs. Looking at self-sufficiency as the following progression from minimal coverage to that which supports sufficient income to permit capital investment, CSI does not yet qualify at the first level:

1. direct costs for clinic operations: personnel, supplies and materials, rent, utilities, transportation and petty cash.
2. the direct costs listed above and the indirect costs of clinic operation: maintenance, cleaning, servicing equipment, and insurance.
3. the direct and indirect costs for clinic operations listed above and the upkeep and renovation of physical resources and the replacement of furniture, office and medical equipment.

4. the direct and indirect costs for clinic operation, the upkeep and renovation of facilities and equipment and contributing to cover the direct costs of the governorate and central offices.

5. the direct and indirect costs for clinic operations, the upkeep and renovation of facilities and equipment, and contributing to cover governorate and central office operational expenses such as upkeep and replacement of facilities and equipment.

6. the direct and indirect costs for clinic operations, the upkeep and renovation of facilities and equipment, contributing to cover governorate and central office operational expenses such as upkeep and replacement of facilities and equipment and contributing towards the establishment of reserve investment funds.

The Self-Financing Strategy Framework: Between 1994-1997, if operating costs increase as expected, the gap between income and costs will range from LE 1,782,000 in 1994 to LE 8,228,000 in 1997, even if each of the 112 CSI centers earns the maximum amount of income from serving full-capacity caseloads. The *Self-Financing Strategy Framework Document* lays out an approach for decreasing this gap through revenue generation and cost cutting.¹³ The framework outlines revenue increases over the next four years through

- increasing the number of clients;
- collecting money from as many clients as possible;
- offering related services for which the client is willing to pay;
- attracting other donors who are willing to a) subsidize operating centers in areas of the country where CSI centers will not meet at least 80 percent of its costs through client fees income; b) subsidize the set-up of related services for which a client is willing to pay; and
- increasing fees, as appropriate.

Each of these techniques is an established means of self-financing. A central aspect of the proposed revenue generation, however, is operating the clinics at full capacity (family planning and other services). Such full utilization is unlikely given CSI performance to date.

Several project documents have referred to the development of other services which could be added to the CSI program to generate additional revenue. Staff at CSI clinics stated their desire to add laboratory and ultrasound equipment and delivery services, so that the center could sell these services to clients and other providers. Two ultrasound machines have been purchased and have been placed in clinics in Assiut and Dakhalia. A study of the revenue possibilities associated with providing ultrasound services is being prepared. Each of these ideas may have merit and may be very lucrative, but they require careful study. Instituting new services, particularly when that involves major equipment purchases and the training of staff to maintain, operate, and correctly utilize the

¹³At the time of the evaluation, the framework was seen as a strategic document with which CSI staff would work over the next five months to develop into a strategic budget.

equipment, is very costly and can change the mission and nature of the clinic. It is hoped that CSI would not add services that would not generate revenues in excess of their costs.

CSI has noted that it recognizes its need to develop other donors to support its activities as USAID decreases its support. A color brochure has been developed in English as part of that effort and will be used, CSI stated, when MOSA approves its status as an independent institution.

Cost Control: CSI proposes to cut costs by June 1993 in three budget line items — personnel, supplies, and renovation/capital — that account for over 75 percent of its costs by

- reducing service delivery staff by 50 percent and reducing management costs to no more than 35 percent of the total operating costs;
- assigning remaining staff to work as a team with several existing jobs merged into one new position;
- increasing cost-efficiency by simplifying all procedures and eliminating unneeded procedures.;
- implementing procedures that control purchasing and inventory of supplies; and
- controlling the maintenance and repair of the facilities rented for CSI centers and the equipment bought with USAID funds.

The cost-cutting measures outlined in the strategy are estimated to reduce operating costs by 16.7 percent per year from 1993 to 1997. The total savings would be approximately LE 8,052,000 over the four-year period. Although this seems an appreciable cut in spending, CSI estimated its total operating costs for the four years 1993-97 will still be LE 40,201,000 after the 16.7 percent cuts.

An important part of the cost reductions is staff reorganization and reduction. Ideally, an organizational restructuring should begin from the top of the organization through a review of functions all the way down the organizational ladder. CSI, however, is beginning the process at the clinic and governorate levels. CSI stated that a review of headquarters will be undertaken at a later point. At the clinic level, CSI will be combining several positions into one multi-function position, which should increase efficiency but may sacrifice the outreach effort. At the governorate level, CSI will reduce the number of governorate offices to 10, with some of the offices covering operations in more than one governorate. Governorate management staff are also being reduced.

Without an in-depth review of CSI, beginning at the headquarters level, it is difficult to assess the proposed staffing structure; however, the impression is of a top-heavy organization at the central level as well as the governorate. It is important that a total review of the institution, beginning at the top, occur soon.

As noted earlier, programs that offer only family planning services are not self-financing anywhere in the world. The very best programs operating in Latin America and the United States sometimes can cover as much as 60 to 70 percent of their operating costs through client fees and cross-subsidization with other programs. CSI's self-financing strategic framework plan is an ambitious one that proposes that CSI can meet approximately 52 percent of its operating costs through client fees. Whether the cuts proposed will affect the quality of the services offered, and whether, in fact,

maximum caseload capacity can be attained are unanswered questions. The assumptions made in the strategic framework document regarding all 128 examining rooms operating at maximum caseload capacity and collecting a basic fee of LE 10 for first visits and LE 1 for 50 percent of the revisits are, however, very optimistic.

Client fees, if the CSI clinics operate at maximum caseload capacity with increased fees, will be LE 20,772,000, leaving LE 19,429,000 to be covered by funds from other sources. CSI estimates USAID will contribute LE 10,000,000, still leaving LE 9,489,000 in needed revenues. After 1997, if no further cost reductions are instituted and no additional revenues from operations or donors are realized, annually CSI will be over LE 6 million short of meeting its operating costs, even if all of its clinics are operating at maximum caseload capacity.

6. Quality of Care: Lessons Learned in the MOH/SDP and CSI Subprojects

Conclusions about safety, effectiveness, efficiency, replicability, and cost of quality services in both the MOH/SDP and CSI subprojects are discussed in this chapter. The data in these areas which resulted from the evaluations of the two institutions are most meaningful when discussed as a whole.

6.1 Safety and Effectiveness

6.1.1 Choice of Contraceptives

In Egypt, there is a limited choice of long-lasting methods. At the same time, there is a clear preference for such methods. Table 6 presents the method mix in the MOH and CSI.

Table 6
1992 Method Mix in the MOH and CSI

Institution	Method mix: percentage of use		
	IUDs	Pills	Other
MOH	89%	9%	2%
Upper Egypt	66-90%	8-27%	1-6%
Lower Egypt	81-95%	3-14%	1-3%
CSI			
Upper Egypt	50%	28%	22%
Lower Egypt	70%	11%	19%

Source: CSI and MOH/SDP reports

Choice in contraception means that there is a variety of suitable contraceptives for clients at different points in their lives. For most women in Egypt seeking a long-lasting method, however, particularly from the MOH, there is essentially only one choice — the IUD. Cairo is the best example of this: SDP data reveal that in Cairo in 1992, 95 percent of all MOH clients were using the IUD.

The expansion of the availability of and access to the injectable hormonal contraceptive would increase the choice of long-lasting methods. That there is such concern about its use in Egypt is remarkable: it contains progestin only and is safer than the combined oral pill which is currently offered in Egypt that contains estrogen as well as progestin. (Estrogen has been shown to contribute to the incidence of blood clots and high blood pressure.) In the CSI clinics, client choice has been increased significantly by the constant availability of the injectable hormonal contraceptive.

Norplant offers a second means to expand choice. The recently published results of the Norplant clinical trials (conducted by the Egyptian Fertility Care Society with Family Health International technical assistance) have confirmed its safety, suitability, and acceptability with regard to the nutritional and cultural life patterns of Egyptian women (see Appendix D). The three-year continuation rate of approximately 66 percent indicated acceptability comparable to international

rates. The Egyptian Fertility Care Society has designed a sound, if very conservative, method for the introduction of Norplant in the national program. Again, Norplant, like the injectable hormone, contains only progestin, no estrogen. Thus, both the injectable and the implant are safer than the combined oral pill currently offered in Egypt.

6.1.2 Information Given to Clients

Part of the safety and effectiveness of any program depends on information being given to clients in such a way that the content and import are understood. Much of this is done through radio, television, group discussions, and one-to-one conversation. Verbal communication is particularly important in Egypt and is handled satisfactorily by both the MOH and CSI. Printed materials that would support this verbal communication, however, were not always available in the MOH clinics visited and were seldom, if ever, available to be taken home for further discussion.

6.1.3 Technical Competence

SDP and CSI have both been diligent in the provision of training and the supervision which supports the full application of training. Doctors and nurses demonstrated excellent judgement in their recommendation of specific contraceptives to suit the problems of individual women. The care and sterilization of instruments, the efforts to meet the privacy and other personal needs of women, and the care described for loading and inserting the IUDs and for giving injections all bespoke effective training and professional competence.

A second element of professional competence rests, in part, on the acceptability of the health services provider. The desire of most women to have a female doctor perform the pelvic examination and insert an IUD is clear, as is the desire of the leadership of both CSI and the MOH to provide female service providers. In those situations in which a female doctor is not available full time, the use of mobile clinics staffed by female doctors has had outstanding results.

6.1.4 Effectiveness through Integration

When a health need such as family planning reaches a crisis, it is singled out for recognition, definition, and resolution. As the regimen for diagnosis and management is established, the regimen is then brought back into the health care system in such a way that it becomes an integrated element, strong in its own identity and strengthening its immediate relations. Such was the experience with immunizations which now are an integral part of pediatric care.

Family planning has also followed this course in Egypt. It has been singled out in MCH services for identification and focus, and an excellent management system has been developed. Now it is time for family planning to be re-integrated and refined. Effective contraceptive methods are in hand with IUDs and oral and injectable hormonals, while preparations for the introduction of Norplant await the go-ahead signal. The special training of clinicians is established and ongoing. Methods to inform and motivate women have been identified and, although not presently in full use, they can be readily strengthened. Thus, the provision of family planning services is now organized and providing services alongside other MCH providers — midwives and nurses, general practitioners, obstetrician-gynecologists, and pediatricians.

6.2 Efficiency

Quality family planning services are not dependent on the elegance of the setting or on extensive or high-tech laboratories and equipment. Quality was evident in both the more richly furnished and equipped CSI clinics and in the small but adequate MOH centers. Efficient family planning services appear to be based in acceptable facilities, staffed with female physicians with links to the community.

Furnishing and equipping family planning centers beyond what is necessary for quality services or beyond what clients demand is not an efficient use of resources. Planning, developing, and operating an extensive system of family planning clinics, which are to be partially self-financing through client fees, without knowing the size, location, characteristics, and interest of the market segment which will use those services, is not an efficient use of resources.

6.3 Replicability

To be replicable on a wide scale, family planning services should be relatively simple and inexpensive. The MOH model is replicable in these terms. The CSI model, although successfully replicated throughout Egypt and deserving of credit for its ability to establish standardized levels of quality in its clinics throughout the country, is not replicable for several reasons:

- Costs are high.
- Although CSI has provided high levels of quality family planning services to its clients, it has promoted unnecessary laboratory tests and revisits.
- It is unclear whether the CSI "quality" beyond the six elements¹⁴ discussed in Chapter 5 matters to a significant market segment of Egyptian women. Although it is necessary to replicate the essential six elements of quality, it is unwise to replicate non-essentials unless clients want those non-essentials and are willing to pay for them.

6.4 Cost

Table 7 presents data on the costs of the MOH and CSI programs in terms of couple years of protection (CYP). Overall, the total average cost per CYP for CSI was LE 47 as opposed to LE 15 for the Ministry of Health; i.e., about three times more expensive. (For the USAID contribution alone, the rate was almost seven times higher.) It should be noted that CSI (which was not operating the full year in 1988/89) had very high start-up costs in 1988/89 as it was starting "from scratch." The CSI cost per CYP has declined steadily over the past four years from a high of LE 138 in the initial year of partial clinic operations to LE 39 in GOE FY 1991/92. To compare costs per CYP in GOE FY 1991/92 only, the total cost per CYP for CSI was about LE 39 while for the MOH it was LE 14, or about 2.8 times higher.

¹⁴Clients' choice of methods, technical competence of providers, information provided, interpersonal relationships, continuity of family planning use, and constellation of services

Table 7

Donor and Total Expenditures in Egyptian Pounds (LE) for the MOH/SDP and CSI
and the Annual Growth in Couple Years of Protection Provided by These Agencies
for GOE FY 1988/89 to FY 1991/92

	MOH/SDP					CSI (see note 4)					Rate (CSI/MOH)
	GOE FY 1988/89	GOE FY 1989/90	GOE FY 1990/91	GOE FY 1991/92	Total	GOE FY 1988/89	GOE FY 1989/90	GOE FY 1990/91	GOE FY 1991/92	Total	
Total Donor Expenditures (see note 1) in LE	2,814,321	4,762,582	6,775,710	8,418,700	22,771,313	1,049,401	3,914,369	7,085,978	5,728,262	17,778,010	
Total Expenditures (see note 2) in LE	11,038,904	13,613,027	15,352,414	18,167,799	58,172,144	1,050,154	4,283,109	7,750,230	7,935,920	21,019,413	
Total CYPs, adjusted (see note 3)	638,878	769,066	1,125,378	1,294,078	3,827,400	7,633	64,289	169,536	205,543	447,001	
Total Donor Expenditures/CYP (adjusted)	4.4	6.2	6.0	6.5	6.0	137.5	60.9	41.8	27.9	39.8	6.6
Total Expenditures/CYP (adjusted)	17.3	17.7	13.6	14.0	15.2	137.6	66.6	45.7	38.6	47.0	3.1

- Notes:
1. Donor expenditures are mainly USAID's for all local costs and commodities. A small amount of UNFPA funds are for the injectable contraceptives. Capital costs are depreciated. Expenditures for foreign technical assistance and overseas training are excluded.
 2. Total expenditures include donor and GOE expenditures as well as client payments used to defray operating expenses.
 3. Couple years of protection are derived from contraceptive distribution data. Oral contraceptive distribution has been adjusted based on use-effectiveness data and condom data is adjusted based on prevalence/distribution figures.
 4. CSI was not in operation the full year GOE FY 1988/89; hence CYP data are low.

Source: Report on the Costs of the Family Planning Program in Egypt: The Costs of Family Planning Activities Which Received Funding from the Public Sector for GOE FY 1988/89; 1989/90; 1990/91; 1991/92.

7. Upper Egypt Strategies

Since 1989, as recommended by the population assessment undertaken by Gillespie et al., USAID has placed a much greater emphasis on Upper Egypt, which has 25 percent of the eligible couples but very low prevalence, particularly in rural areas.¹⁵ In light of the large numbers of doctors and health facilities in Egypt, the Population/Family Planning II Project gave priority emphasis to developing high-quality public and private clinic-based family planning services throughout Egypt.

In reviewing the appropriateness of this clinic-based strategy for Upper Egypt it was helpful to examine the 1988 EDHS for project baseline data alongside the 1992 EDHS for end-of-project status. A comparison of those data — on contraceptive prevalence, method mix, and fertility — provides the most important indicators of the appropriateness of the USAID Upper Egypt strategy.

7.1 The Strategy to Date

7.1.1 Contraceptive Prevalence

The data indicate that the USAID strategy to date has been very successful. Although contraceptive prevalence has increased all over Egypt, the increase has been most significant in Upper Egypt, particularly in rural Upper Egypt. Over four years, the percentage of MWRA using contraception increased nine percentage points in Upper Egypt, from 22 percent to 31 percent. Few women use traditional methods: the increase in modern methods was from 21 percent of all MWRA to 30 percent. The use of modern methods by MWRA in urban areas rose from 39 percent to 45 percent. The most dramatic increase was for rural women of Upper Egypt: their use of modern methods more than doubled over four years, from 10 percent to 23 percent. See Table 8.

In the 1992 EDHS, as in the 1988 EDHS, the majority of Egyptian women (66 percent) stated they wanted no more children. Data from the 1992 EDHS indicates that women in Upper Egypt have been acting upon that desire in the last four years as they had not previously. See Table 9.

7.1.2 Method Mix

As Table 6 indicated, the IUD is the method of choice for women who use contraception throughout Egypt. Two facts are noteworthy about Upper Egypt: the significantly lower use of the IUD by rural women and, despite that lower use, that there has been a 300 percent increase in its use over the last four years.

¹⁵The number one recommendation of that assessment reads, "An extraordinary, coordinated effort is needed in Upper Egypt. Thirty-two to 54 percent of the couples living in Lower Egypt governorates practice [family] planning. Contrastingly, the average contraceptive prevalence for Upper Egyptian governorates never surpasses 23 percent of the married couples of reproductive age, and if Giza is excluded from the calculation, average prevalence for Upper Egypt declines into the teens. Clearly, a special campaign is required to increase contraceptive use in Upper Egypt."

Table 8

**Comparison of CPR in 1988 DHS and in 1992 DHS,
by Place of Residence and Contraceptive Method**

Residence	1988 DHS				1992 DHS			
	Any	Modern	Pill	IUD	Any	Modern	Pill	IUD
Urban Governorates	56%	52%	17%	27%	59%	56%	13%	37%
Lower Egypt	41%	39%	19%	16%	54%	51%	15%	33%
Urban	55%	52%	24%	21%	60%	59%	17%	36%
Rural	36%	34%	17%	14%	51%	48%	14%	31%
Upper Egypt	22%	21%	10%	8%	31%	30%	11%	16%
Urban	42%	39%	16%	18%	48%	45%	14%	28%
Rural	12%	10%	7%	3%	24%	23%	9%	12%

Source: Egypt DHS 1992

Table 9

Total CPR in Upper Egypt, 1988 to 1992

Governorate	1988 CPR	1992 CPR
Assiut	13%	28%
Beni Suef	15%	29%
Fayum	20%	33%
Qena	12%	24%
Sohag	16%	20%
Aswan	19%	32%
Minia	17%	22%

Source: 1988 DHS and 1992 DHS Preliminary Report

In 1988, only 3 percent of sampled MWRA in rural Upper Egypt were using the IUD; 7 percent were using oral contraceptives. Four years later, the CPR for modern methods had risen to 23 percent, largely because of the increased use of the IUD. Although the use of the pill had risen two percentage points, the increase of nine percentage points for the IUD (from 3 percent in 1988 to 12

percent in 1992) represents a fourfold increase. Such an increase was made possible by USAID's support for contraceptive technology training in the public and private sectors over the last four years.

Rural women in Upper Egypt do continue to use the IUD relatively less than their sisters in urban Upper Egypt or in either rural or urban Lower Egypt. Fifty-two percent of those women using contraception in rural Egypt use the IUD; in the other areas, the figure is 62-65 percent. The reason for this difference, repeatedly heard in conversations with rural women in Upper Egypt and with female service providers, was the reluctance of many rural women to be examined by a male physician. Despite the efforts of the MOH to staff rural clinics with female physicians, most of these clinics are staffed by male doctors. CSI centers in both Upper and Lower Egypt are staffed with female doctors.

7.1.3 Fertility

The GOE, MOH, USAID, CSI, and all those who have worked to promote acceptance and use of family planning in Egypt are to be commended for their efforts. As Table 10 indicates, in the last four years, fertility has declined throughout Egypt and in rural Upper Egypt which had shown a puzzling and worrisome increase in the 1991 Egyptian Maternal and Child Health Survey.

Table 10
Total Fertility Rate
by Residence, 1988-1992

	1988 EDHS	1991 EMCHS	1992 EDHS
Upper Egypt			
rural	6.44	6.71	5.97
urban	4.40	3.86	3.58
Lower Egypt			
rural	5.26	4.88	4.10
urban	3.98	3.46	2.80

Sources: 1992 EDHS and Ibrahim Khodair Osbeba and Yosr A. Ahmed, 1992

7.2 Creation of Demand for Family Planning Services

The strategy to date has been highly successful, but work remains to be done. As Table 10 indicates, fertility in rural Upper Egypt is much higher than the national rate. Women in rural Upper Egypt are having an average of 5.97 births, almost two births more than women living in rural areas in Lower Egypt. Moreover, rural women in Upper Egypt are less likely to have prenatal care or to be assisted at the delivery by a doctor or trained midwife or nurse. According to the 1991 Egyptian

Maternal and Child Health Survey (EMCHS),¹⁶ the infant mortality rate at that time in rural Upper Egypt was 85, almost double that of rural Lower Egypt and significantly higher than that in urban Upper Egypt (53).

7.2.1 Attitude

Forty-six percent of women in rural Upper Egypt wanted no more children, but in 1991 only 19.8 percent were using modern methods. Forty-five percent of the women who were not using contraception believed their husbands approved of family planning.

7.2.2 Use

In 1991, of those women in rural Upper Egypt who wanted no more children, 29.6 percent had never used contraception, but planned to use contraception.

Of those women in rural Upper Egypt who wanted more children in 1991, a high percentage had never used contraception and did not intend to do so (59.8 percent). They did not recognize the health benefits of child spacing. The rural women of Upper Egypt are still behind women of other regions in recognizing the importance of child spacing to the detriment of their own and their children's health.

¹⁶The 1991 EMCHS provides the latest available information on indicators discussed in this section.

8. Principal Conclusions and Recommendations¹⁷

8.1 Conclusions

Clinics and Utilization

CSI has established 17 primary centers and 95 subcenters in 17 governorates. By the end of 1992, it had recorded 298,091 new family planning acceptors (i.e., new clients in a particular CSI clinic). At the end of four years, however, CSI centers are very underutilized for family planning. Whereas they have the installed capacity to see over 240,000 NFPAs a year, they are only seeing 40 percent of that number. Thirteen of the 17 primary centers have averaged less than 50 percent of the projected utilization by NFPAs. If CSI were to assess the primary centers' utilization by NFPAs on the same basis it did for all services, 11 of the 17 primary centers would be defined as "low performing." Utilization is lower in Upper Egypt than it is in Lower Egypt.

Quality

The quality of the family planning services is excellent. In addition, throughout Egypt, in conversations with USAID, the Ministry of Health, and CSI, comments were made about the positive effect high-quality CSI services have had on the rest of the Egyptian family planning program. The CSI focus on quality has successfully spearheaded a new national emphasis on the quality of family planning services.

CSI Market

As CSI evolved from its original purpose of upgrading the quality and quantity of EFPA services, it failed to define its own market segment. It has been supply driven, believing that if quality family planning services were offered, they would be fully utilized. Demand for those services has not been analyzed, however, and in the absence of such an analysis, there are only theories as to why the offered high-quality services are so underutilized. A CSI marketing strategy needs to be based upon careful decisions about the nature of services (product), price, place, and promotion in relation to that demand.

It is important to analyze the demand for CSI services relative to its competitors. CSI prices may be a factor in the low attendance in so many clinics. A critical question is not only how many women are there in a particular region who can pay CSI prices, but more important, how many women in a region are there who are willing to pay the price differential between CSI and MOH services, now that MOH services are of good quality? How many women are willing to pay three to four times as much at CSI for the additional comfort, convenience, appearance, and "class" of CSI than they would at the MOH for essentially the same clinical services?

Self-Financing

CSI has not been a successful self-financing model for the PVO sector. Its set-up, equipping, and furnishing of clinics and management offices have been extravagant with an emphasis on appearance,

¹⁷Appendix B provides a list of secondary conclusions and recommendations.

which it equates with quality. Several items of equipment are truly excessive, not used, and not essential to the quality of either the family planning or the "other" services being provided. Dopplers rarely, if ever, make the difference in the life or death of a fetus. Similarly, ultrasound equipment is not essential to the reproductive health of women and such equipment requires a specially trained and judicious staff for its correct use. Its requested introduction for the appearance of quality and income-generation purposes is very ill-conceived and should be denied.

CSI centers have been overstaffed, partially due to the low utilization. Current CSI cost-cutting moves focus on reducing costs at this clinic level. Together with cutting costs, CSI is undertaking new strategies to generate revenues. In light of past performance, however, CSI's 1993-97 self-financing plan is built upon an unrealistic assumption of full utilization in all centers. Moreover, even if all CSI centers were operating at full capacity, CSI would still not be able to cover all its operating costs by 1997.

Marketing and Negative Advertising

CSI has struggled to differentiate itself in a family planning market that has become increasingly competitive. In its struggle to be successful in that market, CSI has resorted to negative advertising and the dissemination of false information, which have the potential to create medical barriers to family planning rather than to promote greater acceptance and use of the program as a whole.

CSI's equating appearance and high-tech procedures with quality family planning service delivery is a serious mistake. If CSI's marketing that high-tech procedures are a necessary component of quality family planning services were successful, medical barriers to family planning acceptance and use would be erected which do not currently exist and which are contrary to international indicators of quality.

8.2 Recommendations

1. USAID should fund market research conducted by an independent, objective, and qualified firm to determine if there is a long-term family planning market for CSI, the characteristics of that market, including prices that market would pay and what that market perceives as quality and acceptability. Based on the results of that research, USAID should determine the size and characteristics of the CSI services it wishes to support.
2. All future CSI quarterly and annual reports should present disaggregated data on the utilization of CSI clinics by NFPAs, using a constant, clearly defined indicator of utilization. The numerator of such an equation would be the actual numbers of NFPAs; the denominator would be the actual capacity for NFPAs. Those reports should be used for decision making on closing centers, with joint USAID-CSI decisions being made in light of the centers' utilization for family planning service delivery.
3. The 30 centers which CSI defines as "low performers" should be closed and their equipment and supplies put in storage. USAID should not fund the relocation or opening of these or any other new primary or subcenters until the results of the market research indicate a long-term demand for CSI's family planning services in a specific town in a specific governorate.
4. CSI should immediately cease its negative advertising and dissemination of false information. A program to re-educate and re-acclurate CSI staff in ethical marketing which promotes CSI

without creating barriers in the family planning program or casting aspersions on other family planning service providers should be undertaken immediately.

5. Unless the market research shows that there is a clear and sufficient market niche for CSI to be self-financing, USAID should phase out all funding for CSI over the next two years. If USAID chooses to phase out the CSI project, careful thought should be given to other services picking up the CSI caseload and the distribution of facilities and equipment to other providers who would make more efficient use of those items.

Appendices

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Appendix A

Description of the Evaluation

This evaluation is one of a two-part evaluation focusing on the provision of clinical family planning services under the Population/Family Planning II Project. The two evaluations, one on the Ministry of Health Systems Development Subproject (MOH/SDP) and the other on the Clinical Services Improvement SubProject (CSI) were undertaken simultaneously by a five-person team which spent a combined total of 30 weeks in Egypt in data collection and analysis and preliminary writing and an additional 4 weeks in the United States in further data analysis and rewriting. Although it was originally planned to develop a single report on those two evaluations, USAID and the team concluded at the end of the field work that the volume and substance of the data warranted two separate reports.

The five members of the evaluation team have long-term experience in family planning policy, management, and clinical standards and practice in both the public and private sectors in Egypt and in other developing countries.

In preparation for the evaluation, the team read extensively from project papers, evaluation reports, and other documents. The team was briefed and supported by USAID/Cairo and CSI staffs throughout the evaluation.

The team conducted interviews and collected data at three levels: policy and management, service provider, and family planning clients. The sampling methodology focused on securing data from both Upper and Lower Egypt, at both rural and urban sites. The team collected data in Alexandria and Gharbia in Upper Egypt, and in Fayum, Aswan, Sohag, Minia, and Beni Suef in Lower Egypt. In each of these governorates the team requested that the CSI local project director select a representative sample of CSI centers for the team to visit, including some facilities that had done well and others that had problems. In all, over 20 facilities were visited. Most were for in-depth interviews, others were for brief observation.

The team established indicators for evaluating each question or issue in the scope of work. On the basis of those indicators and questions, the team developed four evaluation instruments, using instruments from the Population Council's *Situation Analysis Study* as a point of departure.

The team was accompanied throughout their interviews with service providers and clients by a female Egyptian family planning specialist who served as a focus group facilitator and as a translator, and by one or two members of the Cairo CSI central office who assisted in translation and governorate introductions. In each of the six sampled governorates, the team met with the under secretary for health who briefed the team on issues in his governorate. In addition, the team was honored to have met for a half-hour with the governor of Gharbia who spoke with the team of the importance of population and family planning in his governorate and of his support for family planning.

Attachment 1

Scope of Work

- 1. Review the Clinical Services Improvement Subproject (CSI) of the Egyptian Family Planning Association (EFPA) and determine the progress it is making toward meeting its subproject goals and objects.**
- 2. The CSI subproject has a sustainability objective. Is this objective feasible? Review the progress which CSI has made toward the self-financing of family planning services. Assess the feasibility of its self-financing plan. Make realistic recommendations to improve the plan so that CSI may serve as a self-financing model to Egypt's private family planning agencies and organizations.**
- 3. The CSI subproject has featured the provision of quality family planning services in order to attract women of some modest means who are concerned about safe, effective and efficient family planning use. The MOH/SDP has embarked upon a Quality Improvement Program to improve the image of the MOH as a service agency. The evaluators should assess the strengths and weaknesses of each approach in terms of family planning service delivery and toward achievement of the goals and objectives of each of the subprojects. Both approaches should be analyzed to identify lessons learned in terms of safety, effectiveness, efficiency, replicability and cost.**
- 4. Given the large number of doctors and health facilities available in Egypt (compared with other developing countries), Population/Family Planning II has given priority emphasis to developing high quality public and private clinic-based family planning services throughout Egypt. Since 1989, a much greater emphasis has been given to Upper Egypt which has approximately 25 percent of the eligible couples, but a very low prevalence, especially in rural areas. Based upon a review of the CSI and MOH/SDP, the team should provide their views as to the appropriateness of this strategy for Upper Egypt and/or identify other needed approaches. Is service delivery enough, or are more demand intensive activities needed?**

Attachment 2

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Attachment 3

Materials Reviewed

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The Clinical Services Improvement (CSI) Project: Building a Base Of Satisfied Clients, A Case Study, Center for Communications Programs, John Hopkins University, November 1992

The USAID Program: A Snapshot

US Economic Assistance Program in Egypt: Population Sector Profile

CSI

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Statistical Reports 1988-92

Achievement Reports 1988-92

Management Work Plans 1988-92

Self-financing Strategic Framework

Trends in Cost of FP Activities 7/88-6/92

Bank Accounts

Document Flow Manual

Financial Regulations

Financial Manual

Budgeting Manual

Clinical Guidelines in Family Planning, EFPA, CSI Project, 1989

Financial Management Manual

Report on the Costs of the FP Program in Egypt: the Costs of FP

Revenue Agreement Between USAID and MOSA for EFPA/CSI Project

1991 Revenue Plan

Capital Equipment Purchases

Statistical Reports

CSI:the clinical services improvement program (brochure)

Intro to the Revised CSI 1993 Workplan: Jan-May 93

EFPA/CSI Revised 2nd Modification of CSI Project, Dec. 1992

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The CSI Project: Building a Base of Satisfied Clients, JHUCCP, Nov. 1992

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Family Planning Operations Research Program 1989-92, Final Report

MIS Manual

Internal Auditing Manual

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Proposed Cumulative Budget '97-'90

Quarterly Revenue Account Reports
Records of financial transactions related to USAID
1989 Annual Work plan Summary
Quality Indicators Dictionary
Annual Report 1989
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Annual Plan 1989
Annual Implementation Plan 1990
Annual Management Plan 1991
Business Plan 1989
Work Plan 1988

Appendix B

Secondary Conclusions and Recommendations

2. Clinical Services

2.1 Clinical Guidelines

Conclusions

A chapter on counseling, which is more than and different from patient education, would be quite useful for the physicians. Since CSI is establishing a multi-purpose worker program, a comprehensive manual in Arabic, including clinical, nursing and counseling functions, would be useful.

Recommendation

1. CSI should develop a chapter in the guidelines on counseling for physicians and a manual in Arabic for multi-purpose workers.

2.2 Clinics: Location, Space, and Equipment

Conclusions

CSI clinics have uniform furnishings and arrangements; they are spacious and handsomely furnished, with an emphasis on appearance which is mistaken and marketed as a necessary element of quality. Their location, which is usually up several flights of stairs, limits their ready accessibility, however. Equipment for essential family planning clinical services, excluding surgical services, is well maintained and complete to the point of opulence. The equally well-maintained equipment for "other services" focuses on antenatal and postpartal clients, gynecological problems, infections, and infertility.¹ CSI stated this equipment is for services that can provide additional revenue.

Recommendations

2. Future planning of clinics, whether new or moved, should give emphasis to ready accessibility and simplicity in space, furnishings, and equipment. The emphasis on rare expensive equipment, which is not essential to family planning services but rather is used to give an appearance of quality and to attract other patients for income-generating purposes, is not an ethical part of quality family planning. The equating of appearance and "high tech" with quality family planning service delivery is a mistake and should be immediately ended.

2.3 Staffing

Conclusions

CSI is to be commended for the effort it has made and the success it has had in recruiting and maintaining female doctors. However, the current staffing of CSI clinics and administrative staff, although well trained, is excessive because the clinics are so underutilized. The remedy is to increase the number of clients.

¹While CSI center staff stated they provided care for infections of the reproductive tract, there was no evidence of microscopes being used for vaginal smears or wet mounts.

2.4 CSI New Family Planning Acceptors (NFPAs)

Conclusions

The trends for NFPAs per workday per center for both Upper and Lower Egypt are downward since mid-1991. In as much as the goal of this project is to reduce fertility, it is essential for CSI to disaggregate center utilization data for NFPAs in its reports to USAID. Data such as that presented in the CSI Self-financing Strategic Framework is useful for income-generation purposes. It is not helpful in ascertaining whether CSI centers are being utilized as planned for NFPAs. Upon analysis, it is clear that utilization by NFPAs is way below that reported for all services. Thirteen of the 16 primary centers have averaged less than 50 percent of the projected utilization by NFPAs.

Recommendations

3. CSI should disaggregate and analyze center data for NFPAs on a routine basis. New definitions of low-performing clinics should be developed in collaboration with USAID; in as much as the project goal is to reduce fertility, these definitions should be based upon family planning utilization.

4. USAID must determine why CSI clinics are not being utilized as planned. See recommendations in Section 5.2.2 on market segment.

2.5 Other Services

Conclusions

Although child health services are a tempting solution to CSI underutilization, CSI should establish a legal basis for provision of these services and should assess the market potential and soundness of such a move before informally entering into such service provision.

Recommendations

5. CSI should carefully assess its legal authority to provide the other services it is currently providing, formally and informally.

6. Any expansion into new health care areas should only be undertaken 1) if a careful and professional market study (see Chapter 5 for a discussion of market segments) indicates that there is a significant and profitable CSI market segment in the area; and 2) if, in balance, the positive effects of such a new area would outweigh the negative effects of such a new venture upon the primary mission of CSI, namely family planning.

7. Further advances into the field of gynecology which would require special skills and equipment should not be pursued as part of this family planning program.

3. Outreach and IEC

Conclusions

The continuing utility of the outreach effort varies among the centers. The outreach function is overstaffed, and would probably be equally effective and less expensive with one male worker in a governorate to provide the services for men, and an emphasis on female workers to visit and meet with the women.

While some of the outreach/IEC aids are fully utilized, microphone trucks seem to be underutilized, as do educational video tapes in the centers.

Recommendations

8. The centers should use their "Source of Referral" reports to determine the direction of their outreach efforts, and those efforts should be carried out by women when the appeal is to women, and by men only when the appeal is directly to men.

9. Effective means of communicating IEC and outreach information, such as microphone trucks and video tapes, should be fully utilized both in the service of educating the community to family planning and of increasing the use of CSI as a good service provider.

10. The use of negative advertising and fear as a means of bringing women into CSI centers should be reviewed at the executive level, and it should be clearly communicated to every employee that these are unprofessional, unethical, and unacceptable ways to convince women to use the services.

4. Quality of Care

4.1 Choice of Methods

Conclusions

The range of methods in this program is very good due to its wide use of injectables and the presence of at least one woman physician in each clinic visited, which facilitates women's choice of the IUD. The useful demonstration of the successful and uncomplicated provision of injectable hormonal contraceptives by general practitioners is a valuable example in Egypt.

4.2 Technical Competence

Conclusions

There is a high degree of technical competence among the staff, of whom one new (3 months) nurse and the physician's assistant were the only ones who had not attended at least one training program offered by the project. The training program that was meant to reach all staff in the CSI project has largely succeeded in doing so. Most of the staff received written materials during the course, use them as reference materials, and find them helpful. The manuals are durable and well produced to withstand the rigors of frequent use.

The quality of information reportedly communicated in counseling sessions was generally good. Because none of the evaluation team spoke Arabic, it was impossible to observe counseling sessions to assess the sensitivity of the providers to individual women, the quality of interpersonal relations, or the counselors' ability to communicate with a variety of women with different concerns and questions about family planning. While counseling sessions may be a bit brief, the prior contact most women have had with the outreach worker probably begins to build a sense of trust with the project as a whole.

The very differentiated roles of outreach worker, counselor, nurse, and physician lead each to hold a rather narrow, task-oriented work focus. Nurses appear to be underutilized in this array of job assignments, particularly given the experience of many nurses in this program. For example, one in Fayoum is also a midwife who was trained at Ain Shams University to insert IUDs after returning from work abroad where she had several family planning courses; another in Gharbia is a midwife who worked in Saudi Arabia and Libya in family planning for 10 years. They provide informal counseling, reassurance to clients, group meetings in the waiting room, and take phone calls from clients in addition to assisting the physician in the examining room and cleaning instruments, which makes them very versatile team members. As the plans develop for the multipurpose worker role, the nurse is probably the likely candidate to take it up, as her prior training gives her the broadest educational and experiential foundation of knowledge, attitude, and skills to carry out the role.

4.3 Information Provided

Conclusions

The information given to clients by counselors, nurses, and physicians is sufficient for them to make a choice of methods that is best suited to their individual lives. The written information about side effects on the appointment card is an outstanding innovation.

4.4 Interpersonal Relationships

Conclusions

Because client-provider interaction was not observed, it is not possible to speak authoritatively on the quality of the interpersonal relations, although all indications are that they were very positive. This crucial aspect of the client-provider relationship, however, will warrant the attention of those who will supervise the multipurpose workers, as it is the most difficult to learn, and the first to be discarded when time is short.

Recommendation

11. Supervising physicians and nurses should observe and evaluate the interpersonal relations with clients and provide feedback to the staff about these relationships. In addition, consideration should be given to systematically upgrading staff skills in this area, if deficiencies warrant it. Those supervising the multipurpose workers should be particularly attuned to this aspect of their role performance.

4.5 Continuity and Follow-Up

Conclusions

Without systematic follow-up mechanisms, there is no way to know why some clients have ceased to use CSI services or whether clients are continuing to use family planning methods. The continued use of a particular clinic for family planning services might be an indication of a satisfied client, and knowing why someone stopped coming to the clinic might provide useful feedback for improvement of services. As outreach workers are dropped from the staffing pattern, an important source of informal information is likely to be lost; and in the absence of a formal follow-up mechanism, the project will have lost the feedback loop from a very important client pool — those who were not satisfied.

Recommendation

12. Some means of assessing client satisfaction should be developed so that before they leave the clinic, clients have an opportunity to say what they liked and did not like about the service. This might reduce the number of drop-outs from the project and would certainly provide important feedback for the staff and administration of the project.

4.6 Constellation of Services

Conclusions

The services currently offered in addition to family planning are appropriately related to the primary task of the clinics, and would seem to be complementary services that would encourage women to come for their own reproductive health care.

5. Sustainability

Conclusions

The underutilization by NFPAs and the declining attendance at CSI clinics indicate that CSI, as the family planning market currently responds to it, is not sustainable as a family planning PVO.

In order to constructively and successfully market CSI and differentiate it from the competition, CSI must be clear about 1) its market; 2) the size of its market; and 3) the kinds of services desired by the women and their husbands in this market.

Recommendations

13. CSI should reconsider its marketing strategy of selling the "CSI brand" and consider targeting the unmet market. USAID should consider whether it wishes to fund a project which focuses on switching users rather than recruiting new acceptors.

14. CSI should develop new performance criteria for all centers based upon their utilization by NFPAs. Centers which have consistently failed to be utilized as family planning centers should be closed.

6. Quality of Care

6.1 Safety and Effectiveness

Conclusions

CSI is to be commended for the choice of methods, including injectables, which it has offered to clients. CSI's successful experience with injectables provides a scientific basis for the removal of the limitation that they be provided by gynecologists only.

6.2 Efficiency

Conclusions

CSI clinics, operating at 14 to 57 percent for family planning clients, have not been efficient. The most important thing CSI can do to increase efficiency is to increase the number of new family planning clients.

6.3 Replicability

Conclusions

To be replicable on a wide scale, family planning services should be efficient and productive. CSI clinics have not been so.

6.4 Cost

Conclusions

The most critical difference in real quality between the two institutions is that CSI has standardized quality so that high-quality services are available in each and every CSI clinic throughout the country. Quality in the MOH, on the other hand, varies. Services in many MOH facilities are on a par, in terms of Bruce's six elements of quality of care, with CSI; many others are below it. Standardization such as CSI has achieved is

expensive. CSI has made it unduly expensive, however, for a variety of reasons including the purchase of expensive and unessential equipment and furnishings and overstaffing. In addition, underutilization has resulted in high unit (family planning client) costs. CSI's new self-financing strategy is addressing these high costs; unit costs should be substantially lower in 1993 than they have been in previous years.

Recommendation

15. CSI should develop and complete the strategic budget quickly so that the cost-cutting principles proposed in its self-financing strategy can be fully implemented as soon as possible.

7. Upper Egypt Strategies

7.1 The Strategy to Date

Conclusions

Probably a number of factors contributed to the remarkably good news revealed through the 1992 EDHS. Certainly the USAID-MOH clinic-based strategy has been one of them. This strategy contributed to increased CPR and decreased fertility in rural Upper Egypt in the following ways:

- the massive continuous training of physicians and nurses in contraceptive technology, including IUD insertion and management;
- the renovation, equipping, and supplying of family planning clinics at all levels, from the district hospital to the rural center;
- the systems development which has resulted in IUDs and oral pills being available throughout the system on a regular and consistent basis; and
- the focus on quality which has not only provided better services to the client but has increased pride and motivation among the service providers, prompting them to be more effective.

Recommendation

16. USAID should continue its clinic-based strategy.

Appendix C

Figures — Client Activity in CSI Primary Centers

Figure 7
Alexandria CSI: NFPA per Workday, by Month, 1989-92

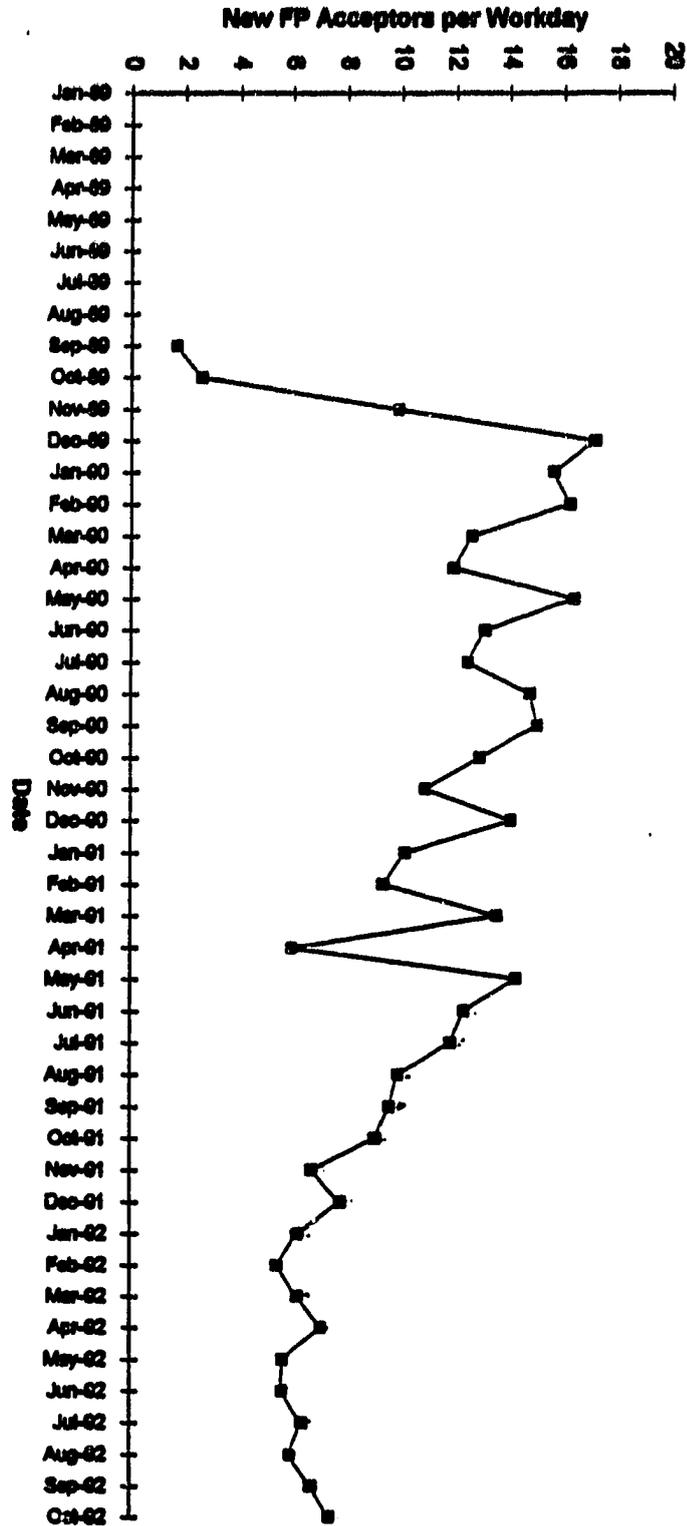


Figure 8
Beheira CSI Primary Center: NFPA per Workday, by Month
1990-92

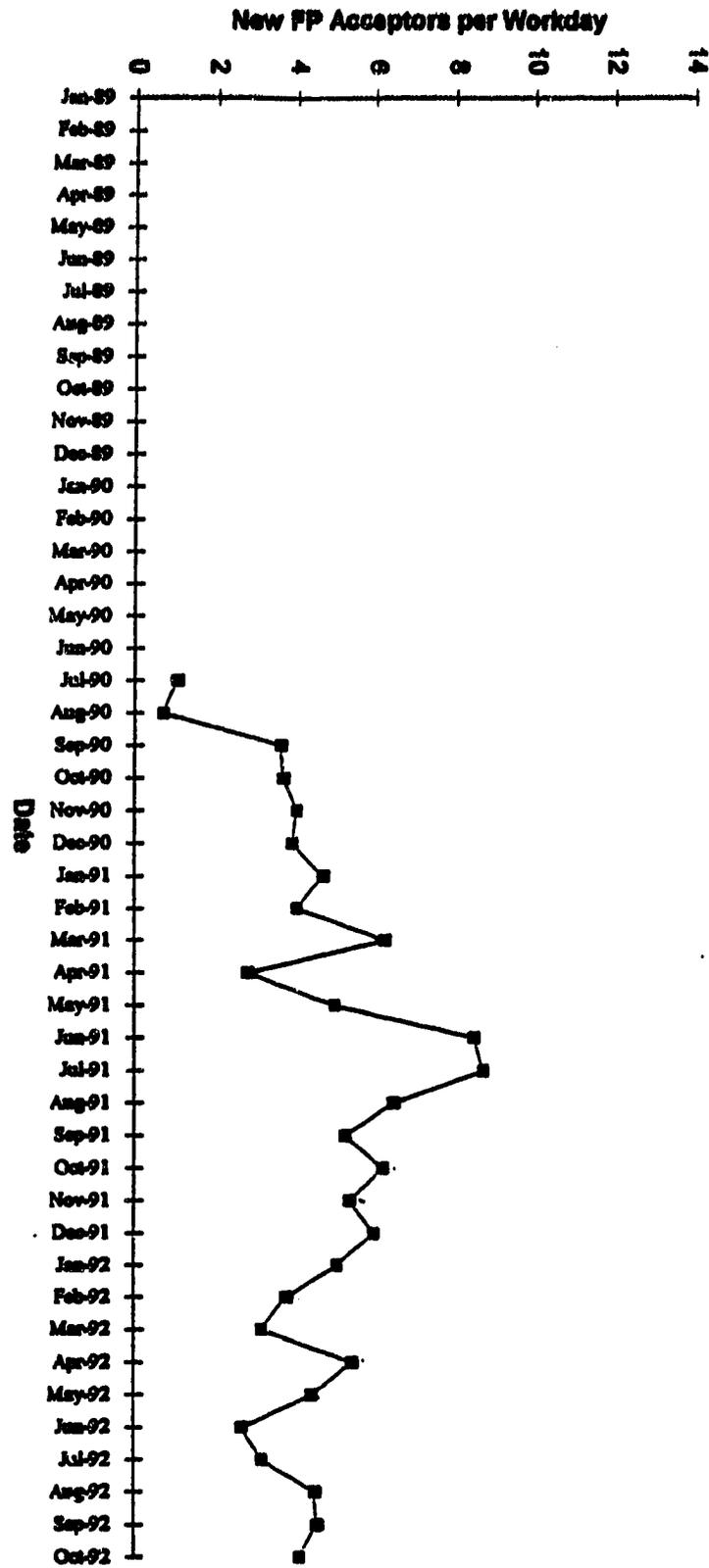


Figure 9
Danzon CSI Primary Center: NFPA per Workday, by Month
1990-92

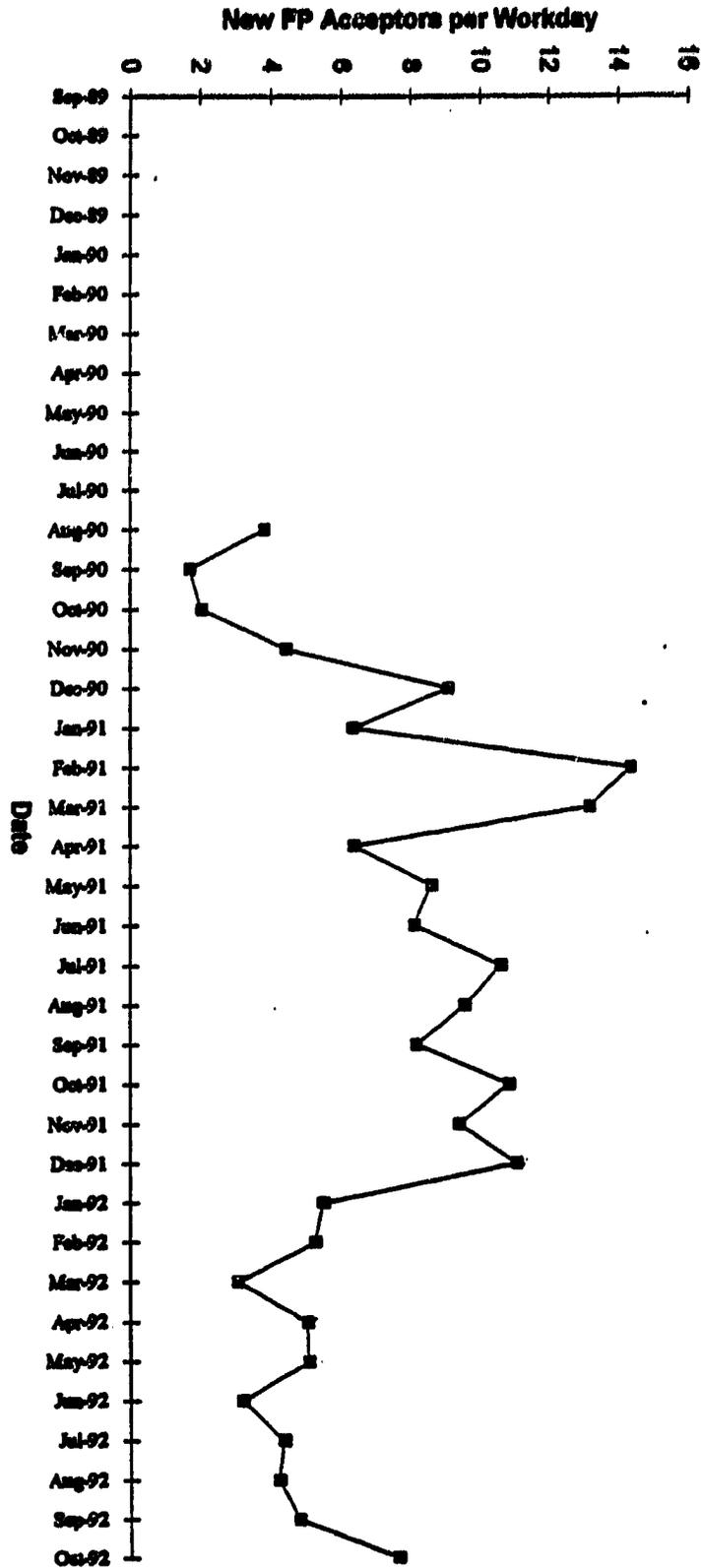


Figure 10
Daqahliya CSI Primary Center: NPPA per Workday, by Month
1989-92

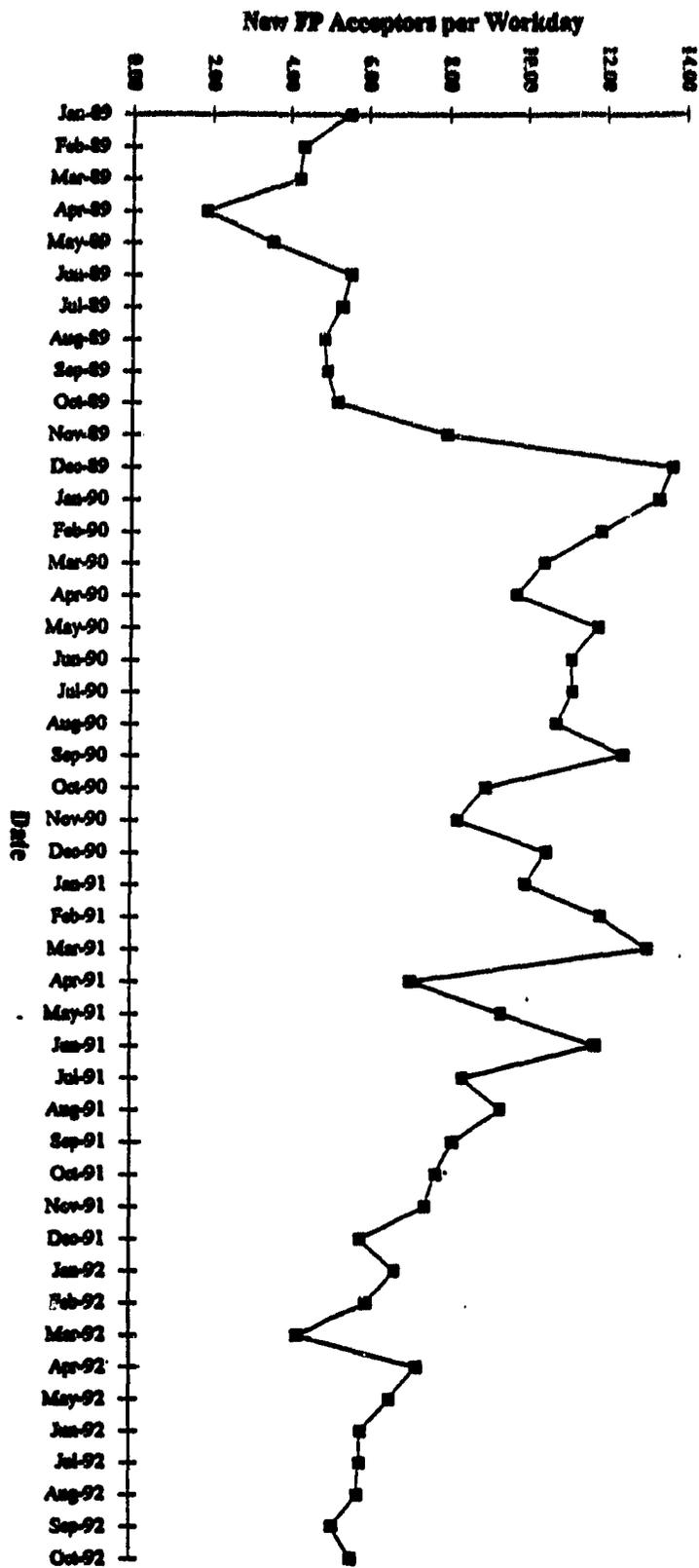


Figure 11
Gharbia CSI Primary Center: NPPA per Workday, by Month
1989-92

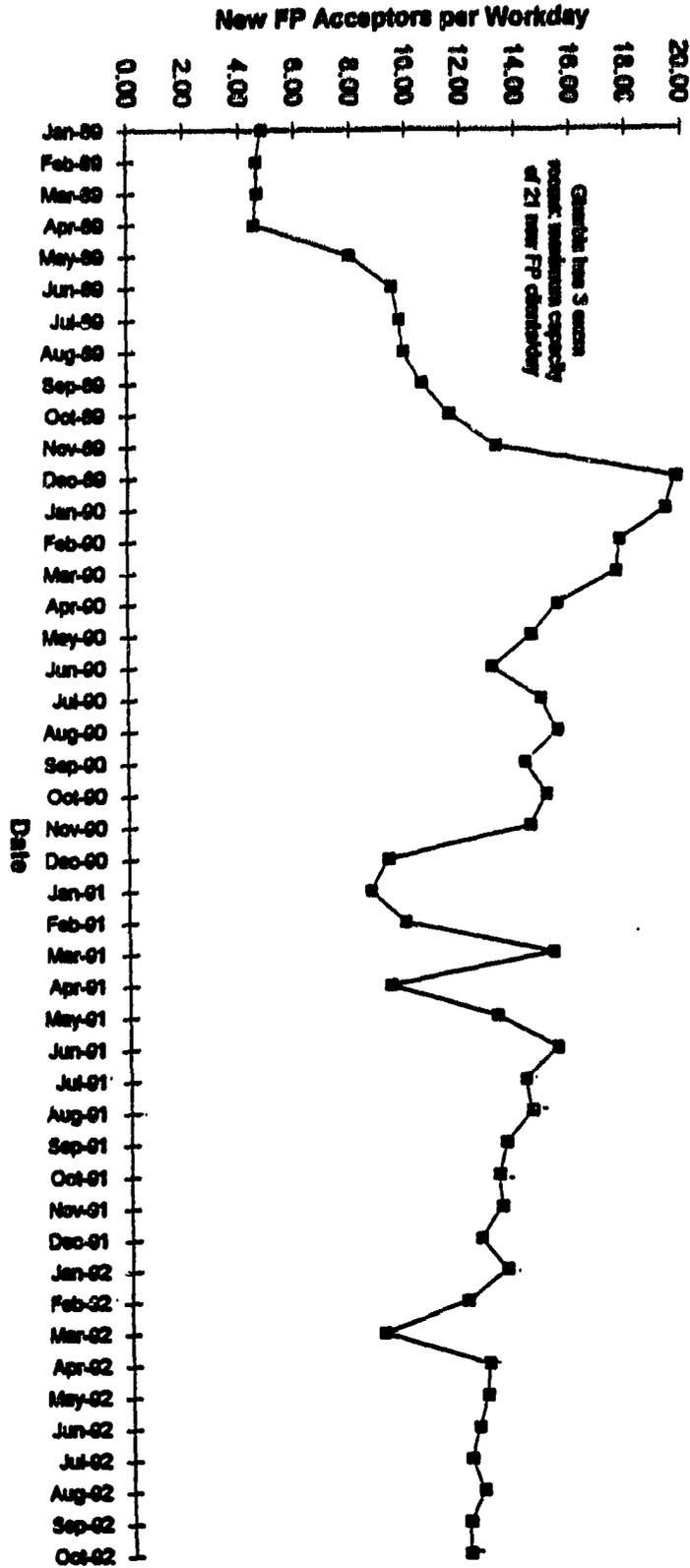


Figure 12
Kafr El-Sheikh CSI Primary Center: NFPA per Workday, by Month
1989-92

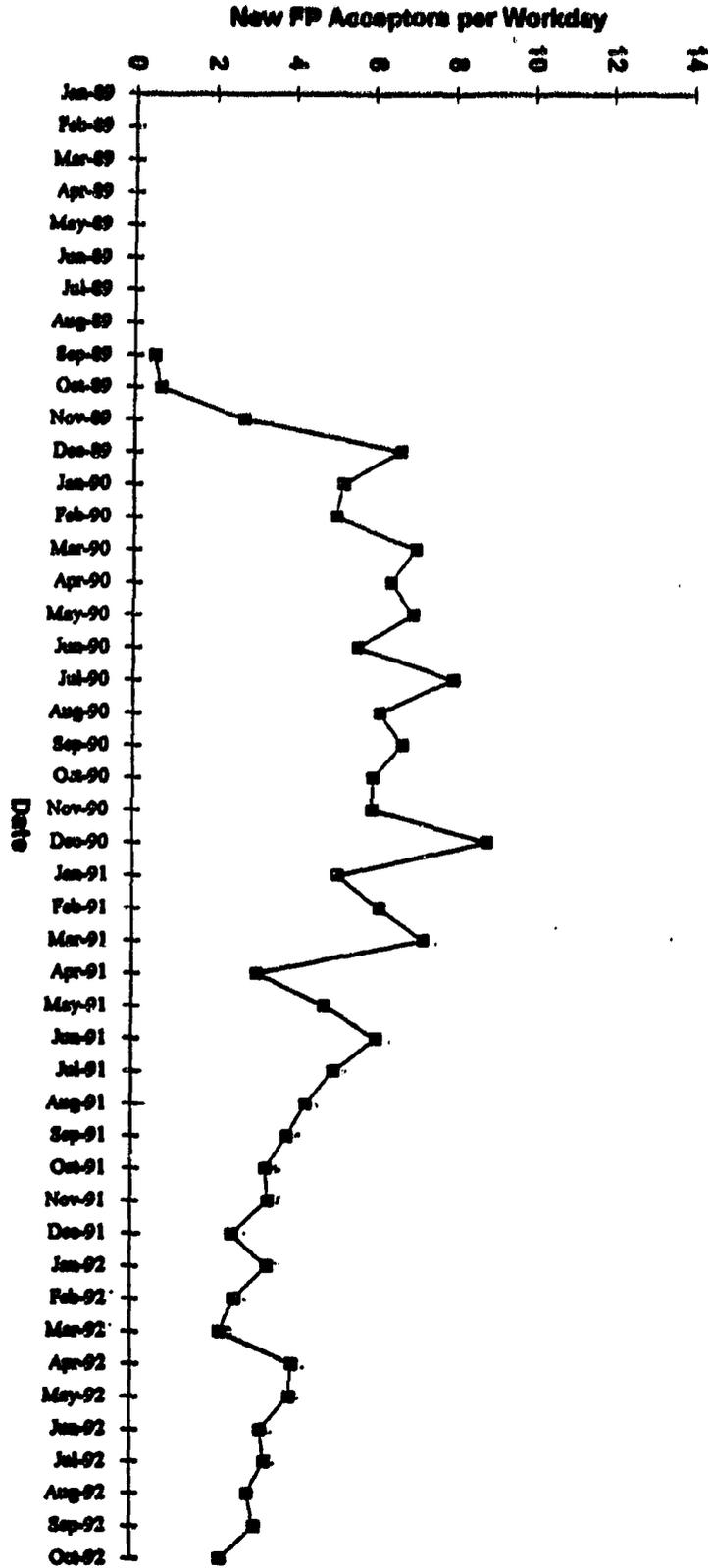


Figure 13
Menoufia CSI Primary Center: NFPA per Workday, by Month
1990-92

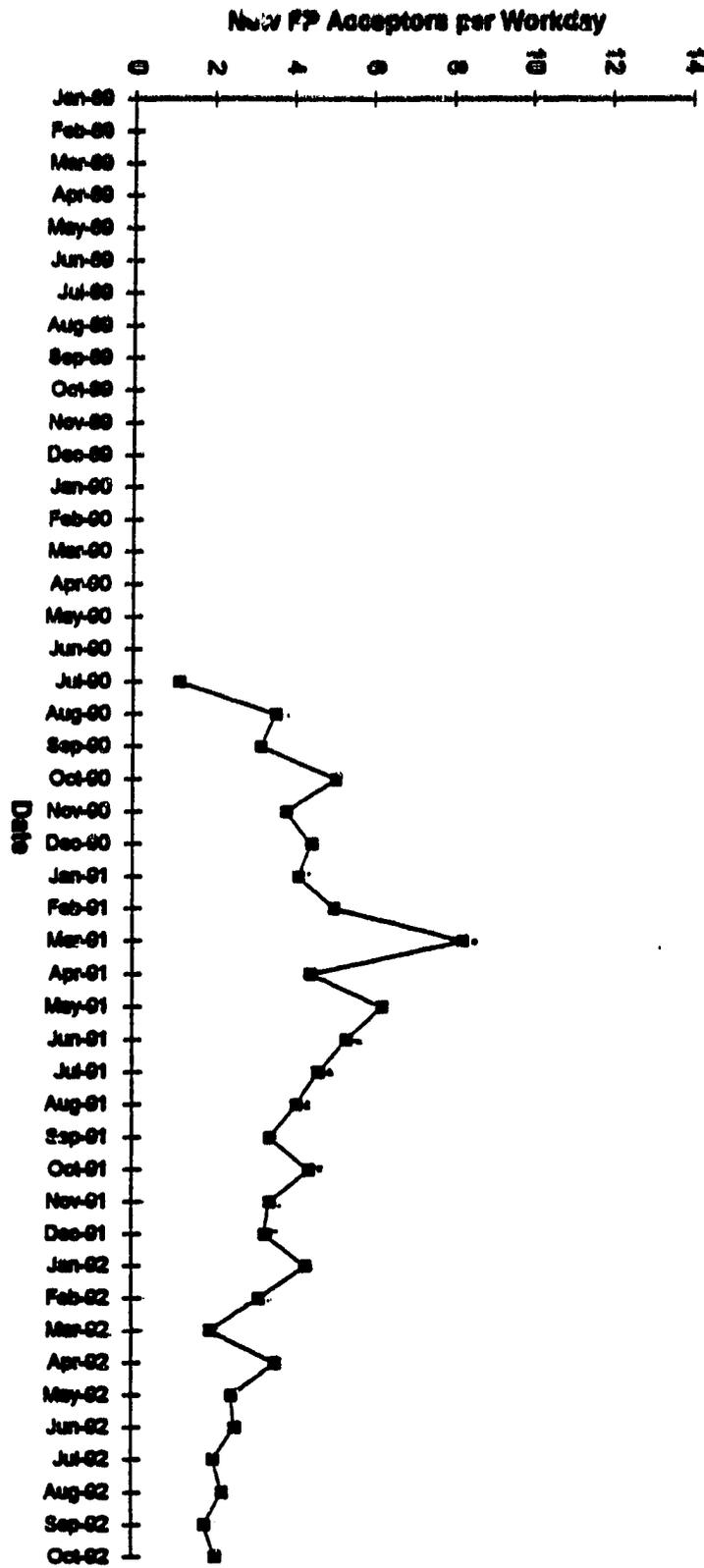


Figure 14
Sharqia CSI Primary Center: NFPA per Workday, by Month
1989-92

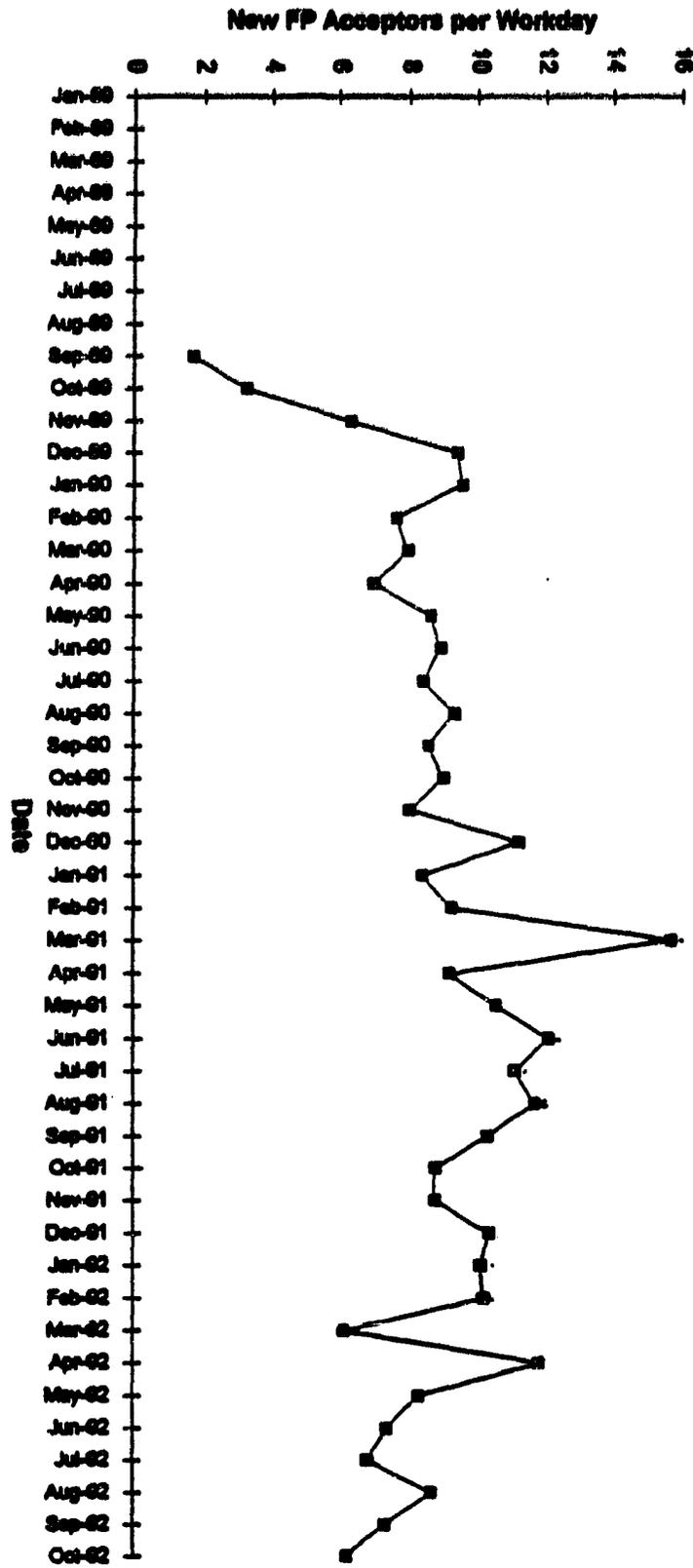


Figure 15
Qalibia CSI Primary Center: NFPA per Workday, by Month
1989-92

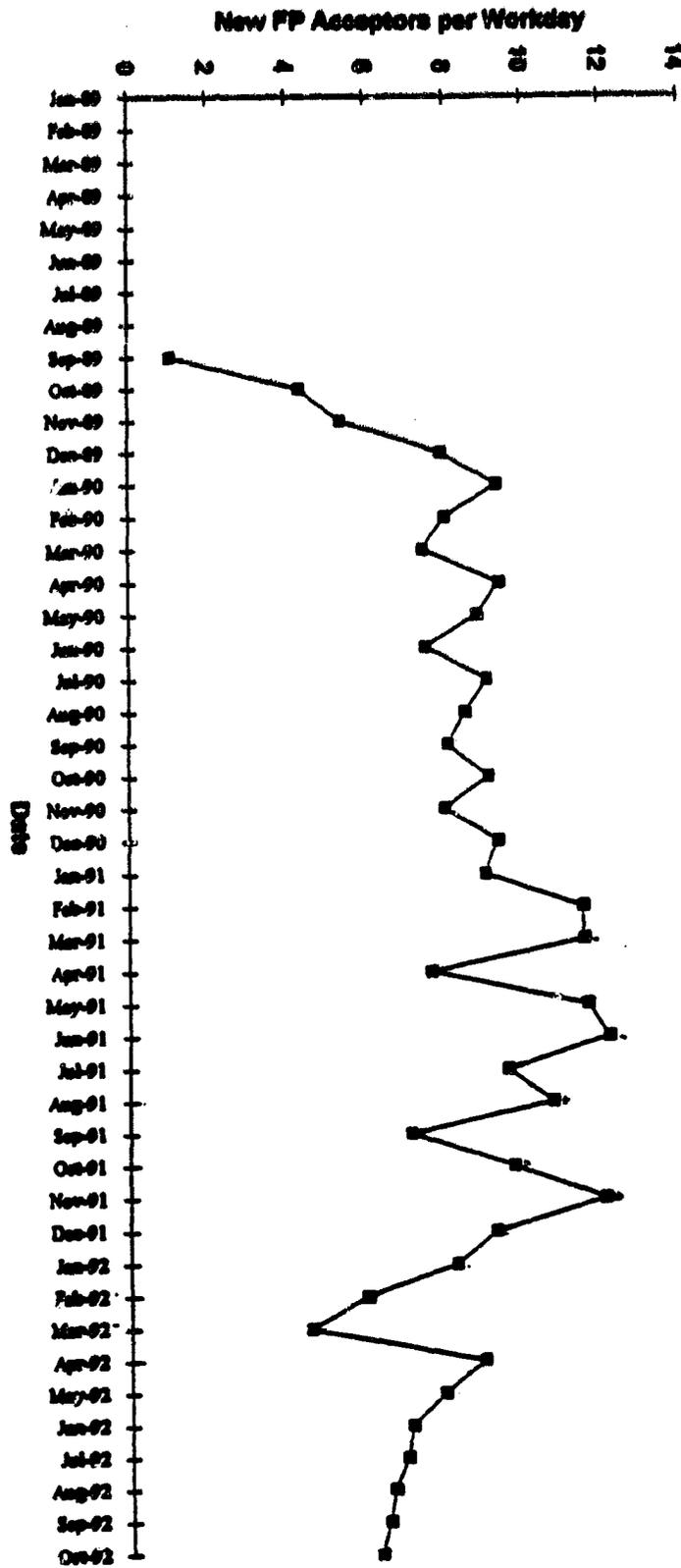


Figure 16
Assist CSI Primary Center: NFPA per Workday, by Month
1989-92

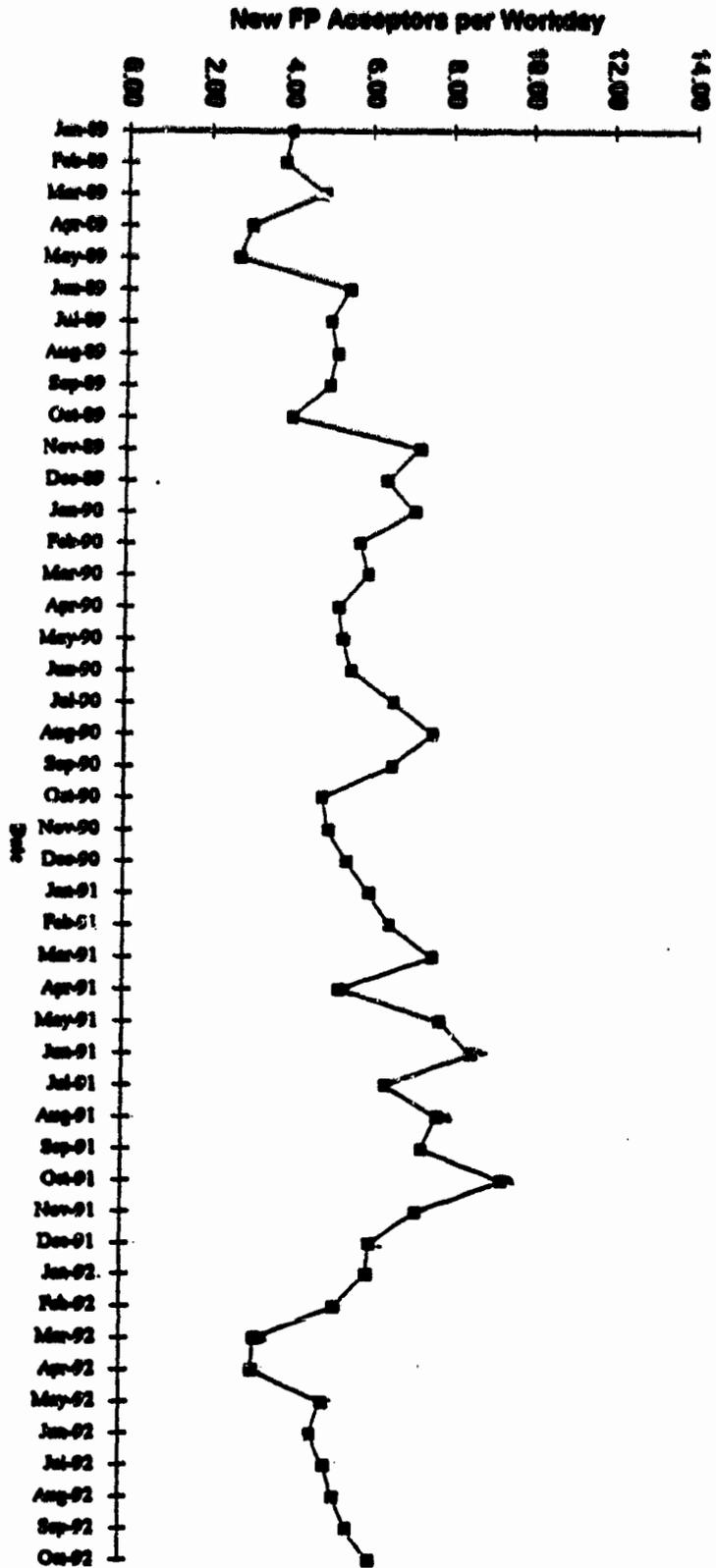


Figure 17
Arwan CSI Primary Center: NFPA per Workday, by Month
1990-92

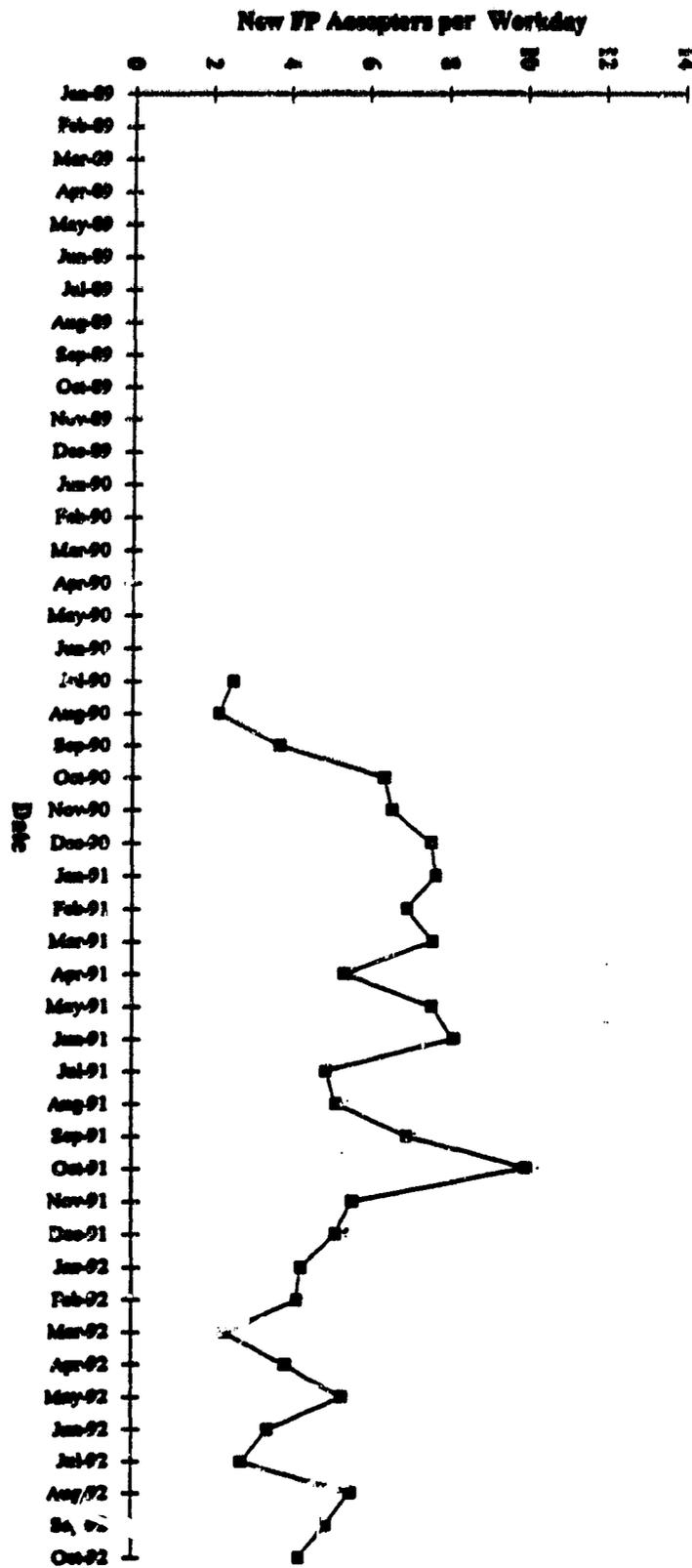


Figure 18
Beat Seaf CSI Primary Center: NFPA per Workday, by Month
1989-92

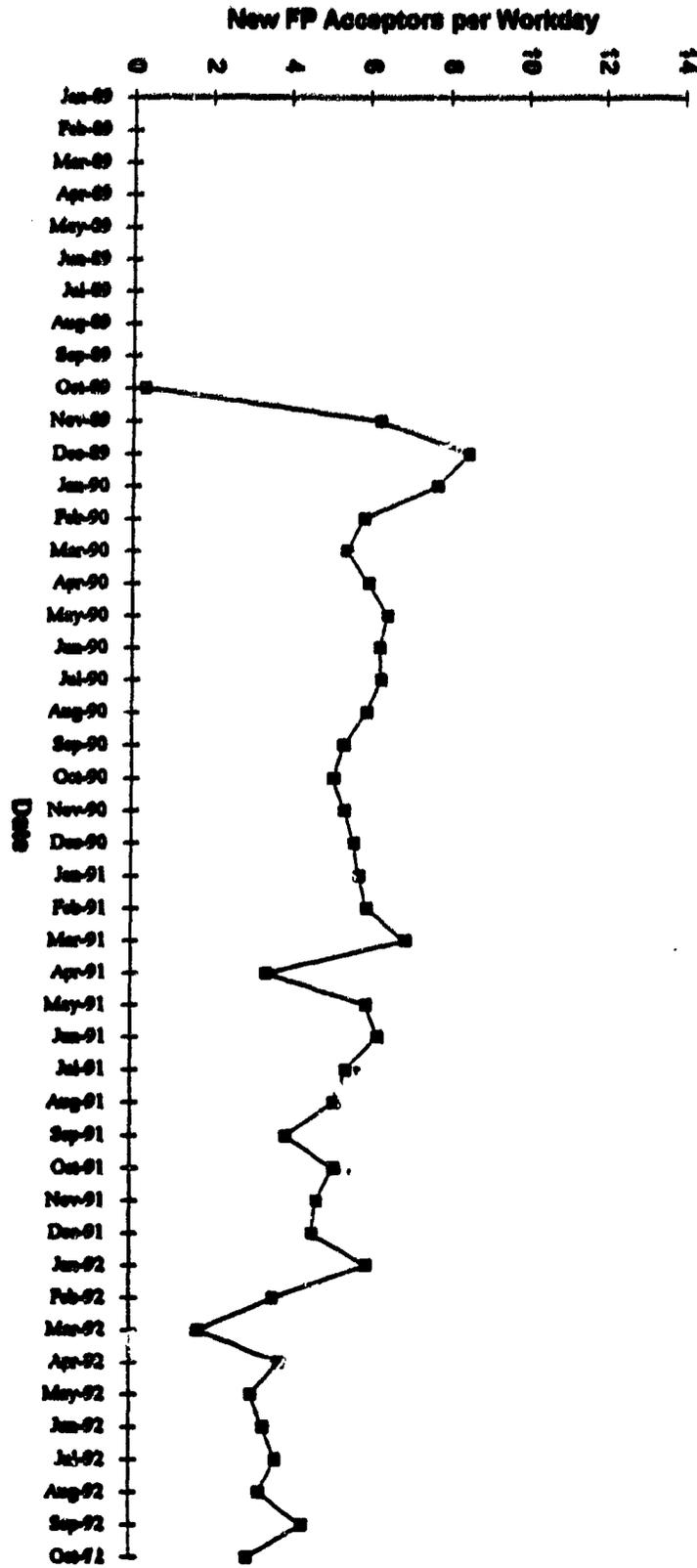


Figure 19
Fayoum CSI Primary Center: NFPA per Workday, by Month
1990-92

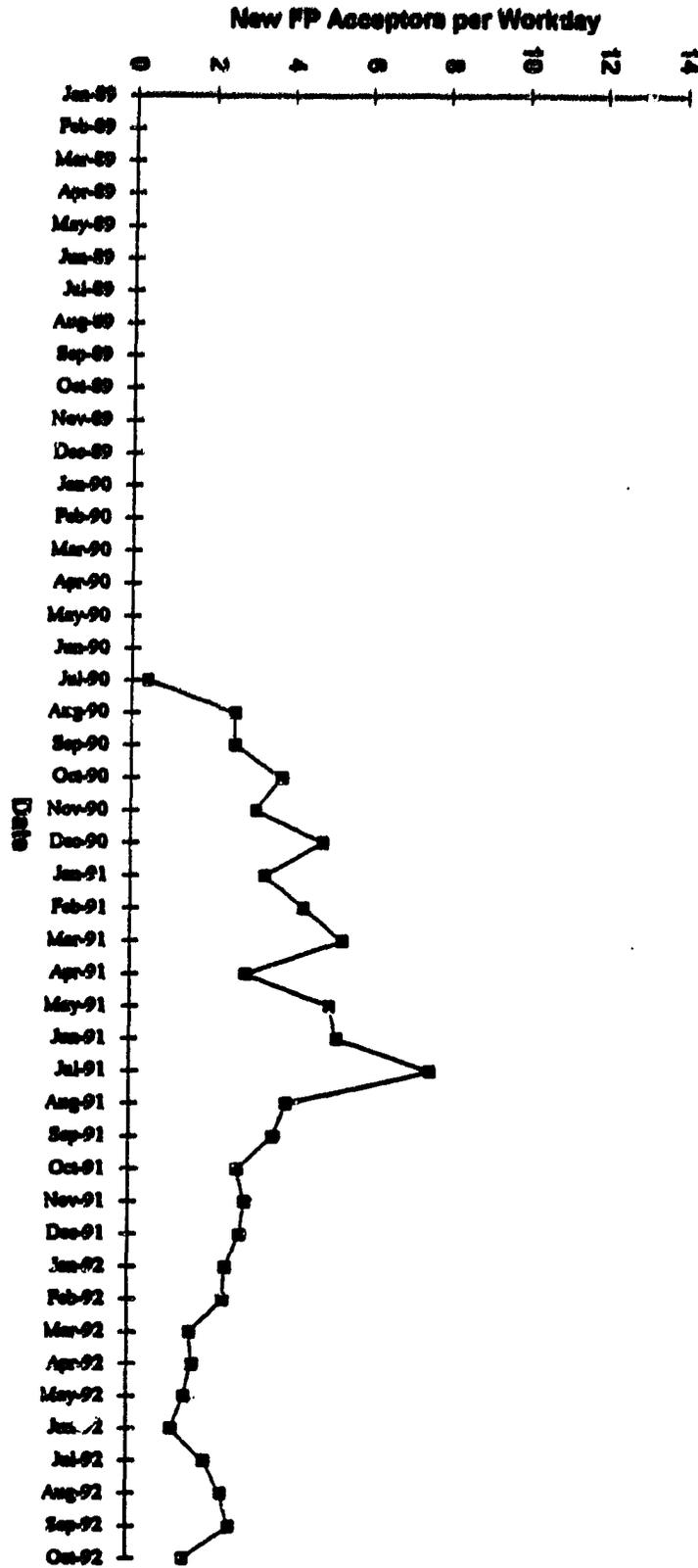


Figure 20
Giza CSI Primary Center: NFPA per Workday, by Month
1989-92

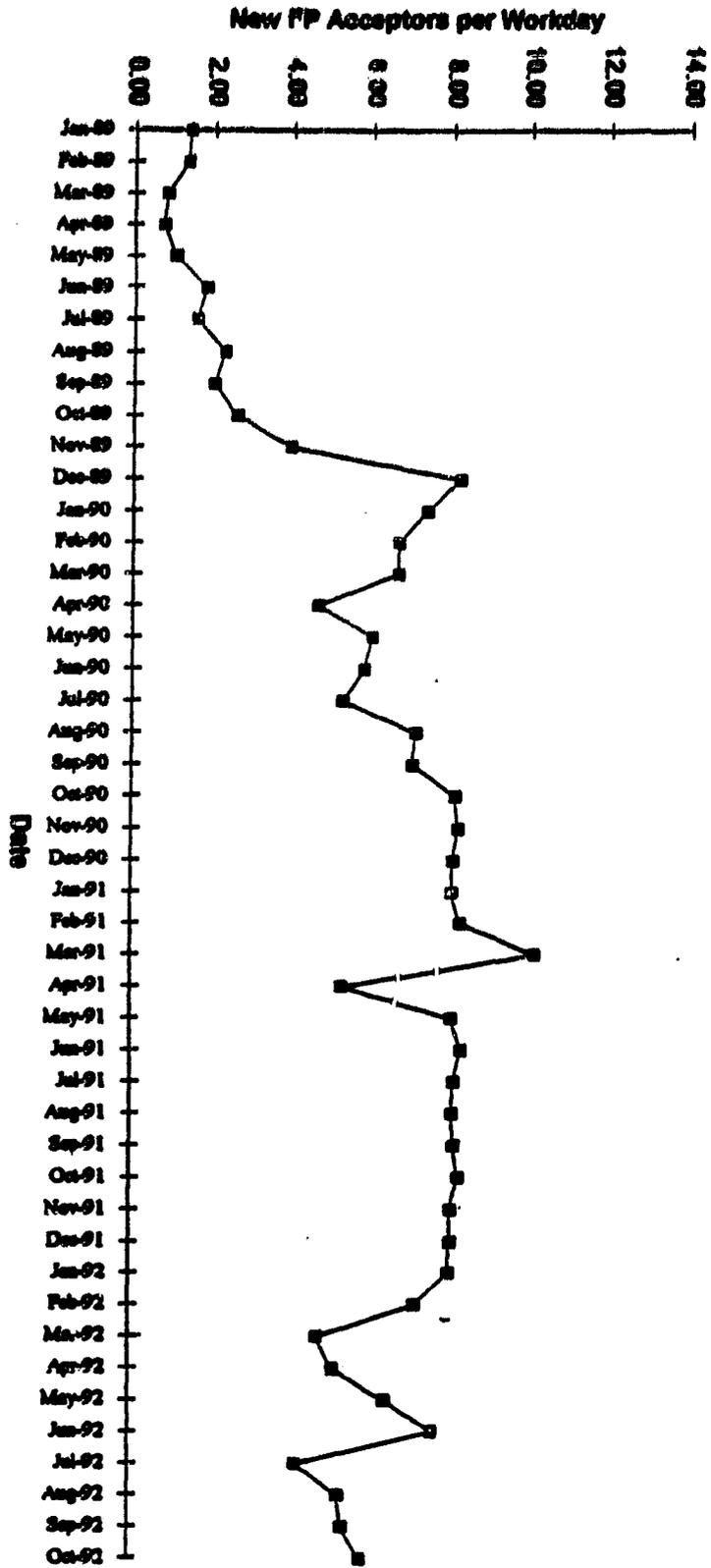


Figure 21
Minia CSI Primary Center: NFPA per Workday, by Month
1989-92

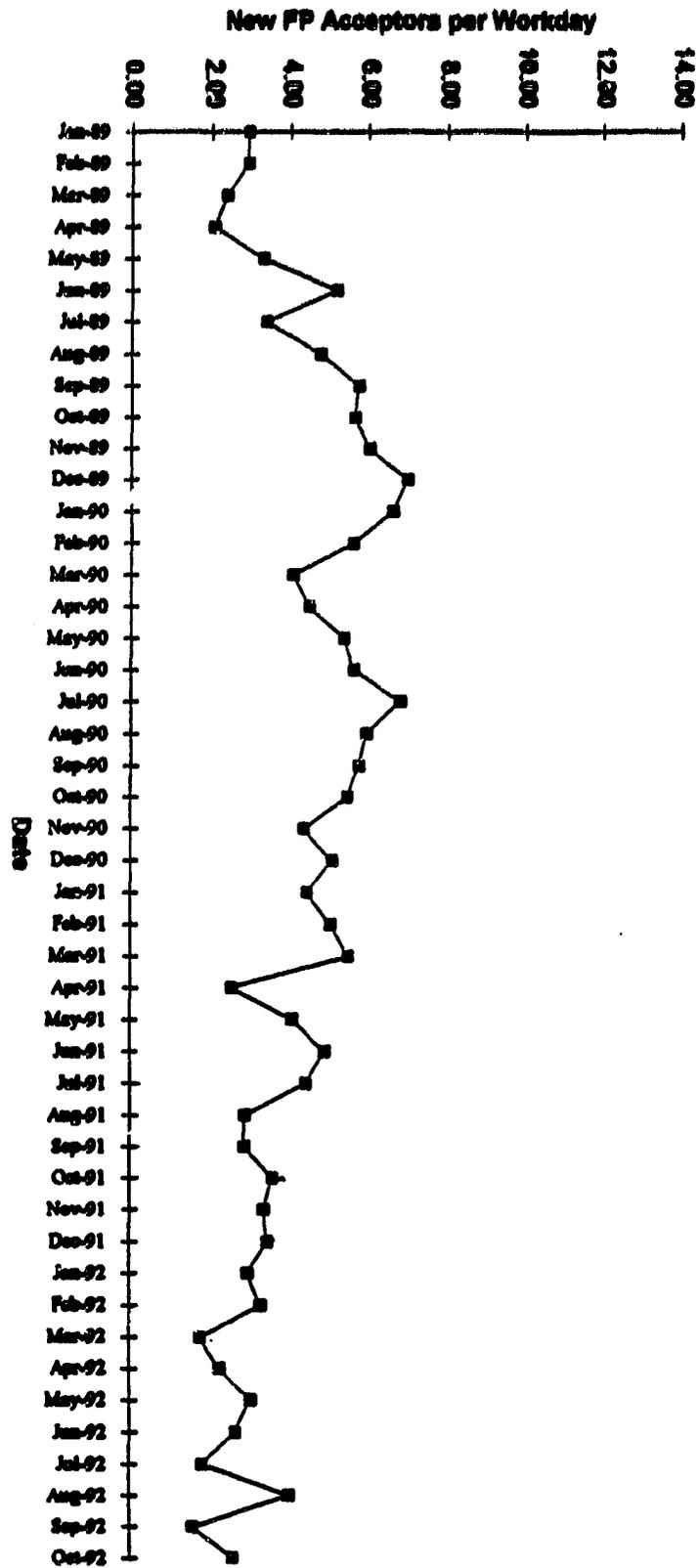


Figure 22
Qona CSI Primary Center: NFPA per Workday, by Month
1989-92

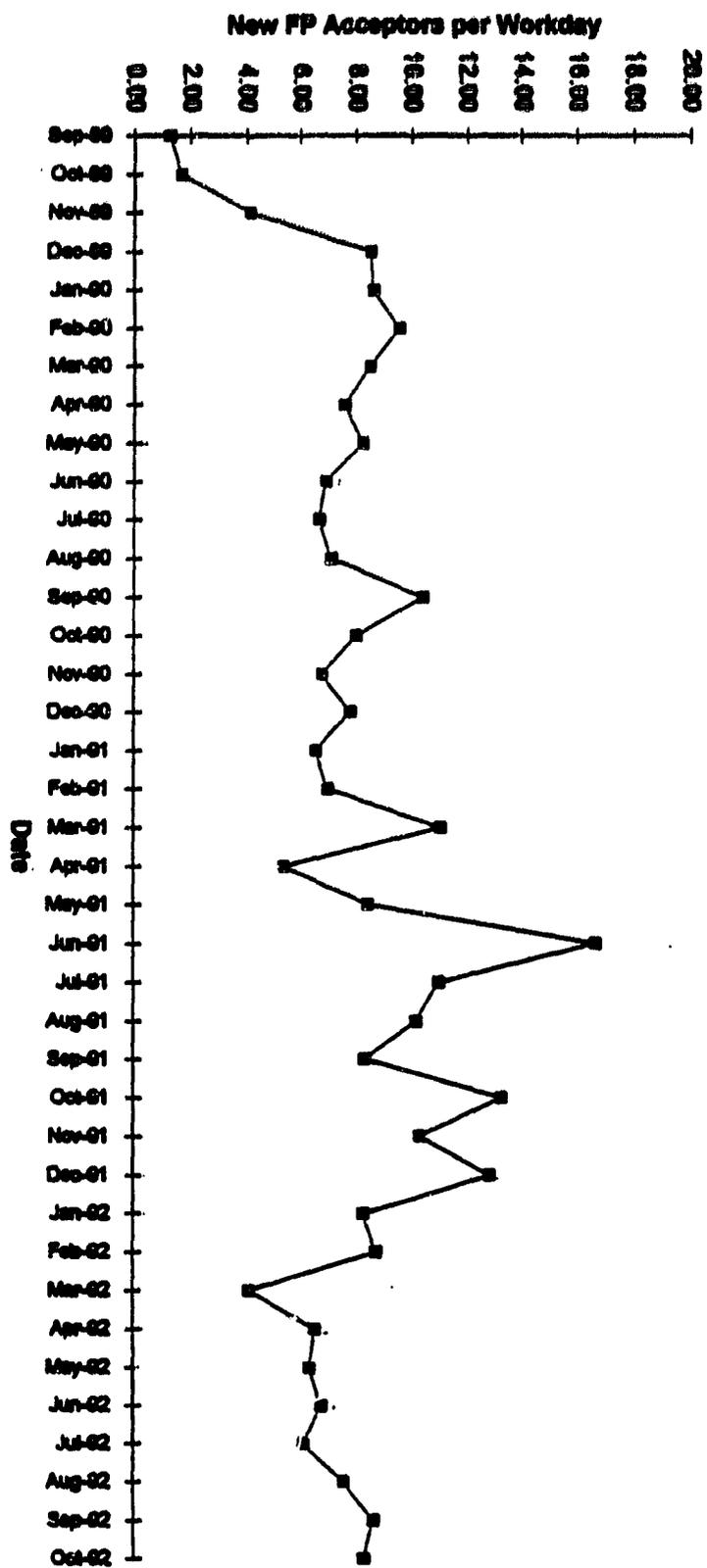
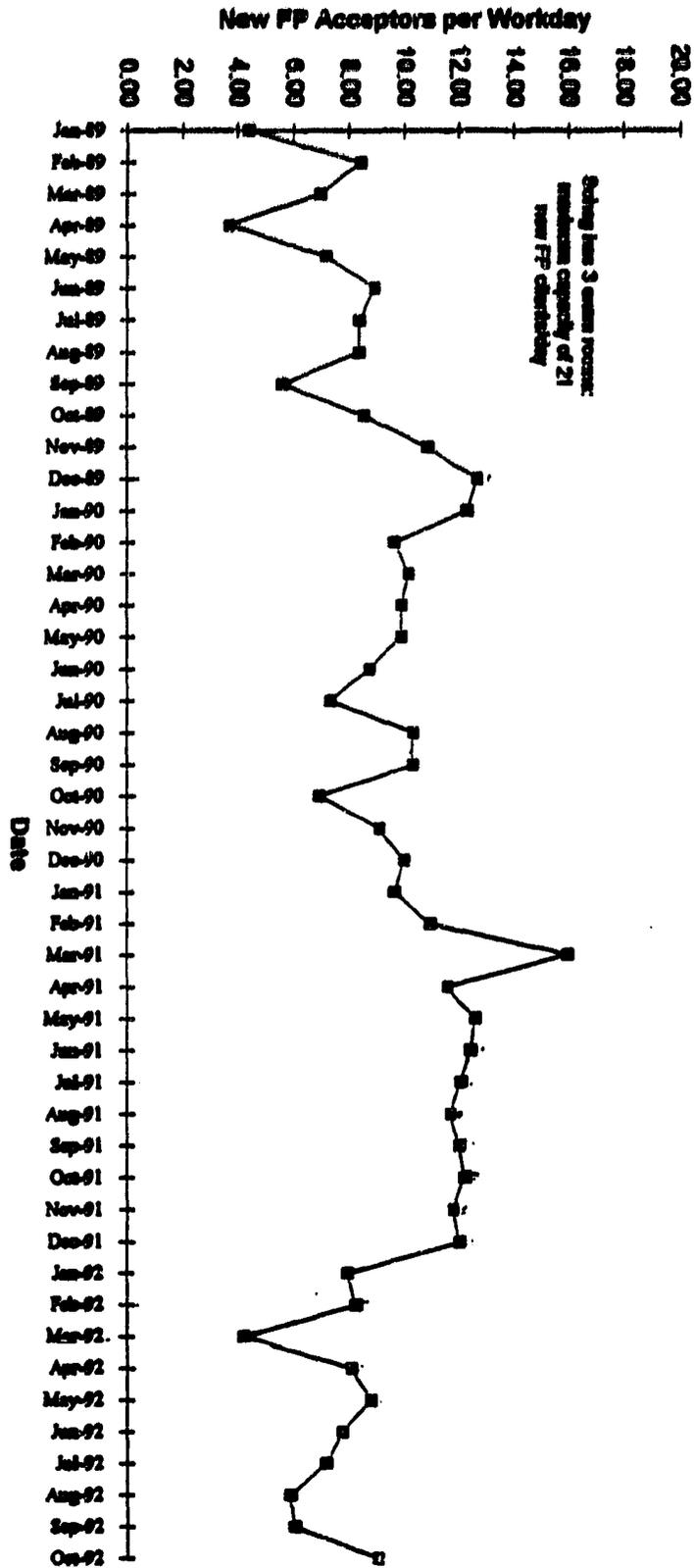


Figure 23
Sohag CSI Primary Center: NFPA per Workday, by Month
1989-92



Appendix D

Report of an Interview with EFCS on Norplant

The following is the report of a meeting between Dr. Ez Al Din Osman, director of the Egyptian Fertility Care Society, and Dr. Rogers Beasley, evaluation team member, on February 23, 1993.

Clinical trials of Norplant have been directed by the Egyptian Fertility Care Society. In a special program in five Universities, some 1,500 women have been enrolled in clinical trials to determine the suitability, safety, and acceptability of this hormonal implant administered under the direction of specially trained gynecologists. After three years, approximately, one third of the participants have dropped out of the program; this matches current reported worldwide experience. There have been no findings in these clinical trials that differ significantly from previous Egyptian experience with Norplant or with current world experience.

Because of the distinct change in menstrual pattern that occurs, it is the recommendation of the EFCS that this distinctive change be clearly understood by the attending physician, by the accepting client, and indeed by all Egyptian physicians who may be in contact with such clients. There are positively no morbid results from this changed menstrual pattern, but to the uninstructed client, attending physician, or neighborhood doctor, the altered flow may be disturbing.

Approval of the use of Norplant in Egypt has been recommended by EFCS to the Advisory Council of the Ministry of Health; it has been approved by the Supreme Council of Pharmaceuticals which has also given its approval for use by Egyptian women. The recommendation now awaits the final approval and numerical designation by the Pharmacy Division of the Ministry of Health which is reported to have taken this action.

The EFCS has subsequently had detailed discussions and correspondence with the under secretary for family planning in designing the methodology to be followed for the introduction of Norplant into the Egyptian health system. This will begin by utilizing the original five universities participating in the clinical trials as training centers for the faculties of the remaining six universities. The training of MCH Centers will follow, beginning with introductory operational research until adequate training of the medical staff has assured their correct implantation of capsules and for their removal. Very special attention will be paid to the full understanding of the changed menstrual pattern by all physicians. EFCS is concerned that sufficient education and communication reach all Egyptian physicians so as to prevent rumors and bad practices in unnecessary and poorly performed removals. It is further emphasized that Norplant is to be offered only as one of many choices of contraceptives in any clinic.

Curricula for training and the necessary IEC materials have already been prepared by EFCS. The initiation of the program to introduce Norplant awaits the decision of the under secretary to call a meeting of the Advisory Council for its approval.

The EFCS made it clear that it wishes to follow the remaining 900 plus women to the end of the five-year period of efficacy of their Norplant implants. The principal remaining focus in the research is the relation of increased weight to the effectiveness of the progestin in the remaining fourth and fifth years. EFCS is quite positive that data from these last two years will in no way interfere with the immediate introduction of Norplant into the national program; in fact, it would be helpful to begin while some of the original participants are still actively depending on Norplant as a training base for the additional six universities.

Appendix E

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The acceptability of Norplant in Egypt

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Abstract

Currently, the pill and IUD account for 83% of contraceptive use in Egypt; Norplant* will be an important complement to those methods of family planning. In Egypt where childbearing begins early, and closely spaced pregnancies are the norm, the long duration of Norplant's effectiveness and its relative ease of use should be appealing. The Egyptian Fertility Care Society (EFCS) initiated a study in 1988 on the acceptability of Norplant in Egypt to study the clientele of the EFCS clinical trial in the five university teaching hospitals.

The clinical trial participants were women in their thirties who had an average of four children. Most had used a method of family planning before Norplant, and were anxious to maintain contraceptive protection as most wanted no more children. Satisfaction with Norplant among users was high. In the survey, 93% of the women expressed satisfaction with the method. More than half (67%) of the women said they would consider using Norplant again in the future, and another 22% were undecided. Eighty-seven percent of the women who had not discontinued were planning to continue with their current Norplant set for the full five years.

Egyptian women like Norplant because of its long duration of effectiveness, the site of insertion, its ease of use, and its relative lack of perceived side-effects compared to the pill and IUD. In Egypt where a reliable, long-term, but not permanent method of contraception is badly needed, Norplant should become a popular method of family planning.

* The Norplant system is a long-acting, low-dose, progestin-only contraceptive method for women. The drug, levonorgestrel, is delivered by means of six silastic capsules implanted subdermally in the arm by a minor surgical technique. Effectiveness is achieved by the steady release of the progestin from the interior of the capsules through the silastic into the blood. A level of levonorgestrel sufficient to prevent conception is reached 24 hours after placement and is maintained for more than five years [1].

Introduction

When approved for general use, the five-year *subdermal* contraceptive implant, Norplant, is likely to play a significant role in the family planning program in Egypt. Currently, the IUD and the pill account for 83% of contraceptive use in Egypt [2]. Norplant will be an important complement to those methods of family planning. In a country where childbearing generally begins when women are young, and closely spaced pregnancies are the norm, Norplant's long-term effectiveness and its relative ease of use could be appealing. Women may face several years at the end of their reproductive lives when they have completed their families, and yet they still need a reliable, yet reversible form of family planning.

Worldwide, over 55 000 women have participated in clinical or pre-introduction trials of Norplant in 44 countries [3]. Norplant has been found to be a highly effective and safe method of contraception. For a new contraceptive method to be widely used, however, safety and efficacy must be accompanied by acceptability. Norplant requires minor surgery for insertion and removal, which could give some women the feeling of having less control of this method than of other methods such as the pill or even the IUD, which can be more easily removed. Social or religious reactions to the menstrual disturbances caused by Norplant could discourage its use in some cultures. The long duration of use could be perceived as a constraint to its use for women who want to space their next birth, but not by five years. On the other hand, the long duration of use could make Norplant highly acceptable, as could the insertion site in the arm.

Women, and their partners where they have been asked, have generally been satisfied with Norplant [4-17]. Most information on the acceptability of Norplant has been derived from clinical trial data on discontinuation and complaints about side-effects, with user-satisfaction questionnaires administered after six months [5-7]. Some studies have specifically included acceptability components [8,11].

While Norplant has been found to be a highly acceptable method in a number of cultural settings, no work has been conducted previously on the acceptability of Norplant in an Islamic country in the Near East. The importance of religious observances and their link to menstruation could affect the acceptability of Norplant in Egypt, since the major side-effect of Norplant to date has been menstrual disturbances.

The Egypt Norplant clinical trials

Norplant has undergone two sets of pre-introductory clinical trials in Egypt. The first was supported by the Rockefeller Foundation and the Population Council in Assuit, Alexandria, Zagazig and Al Mansara in the early 1980s [18]. The second study was conducted in five university teaching hospitals in Assuit, Alexandria, Cairo (Ain Shams and Al Azhar), and Mansoura. Under the sponsorship of the Egyptian National Population Council, it was coordinated by the Egyptian Fertility Care Society (EPCS), with support from the United States Agency for International Development

(USAID) and technical assistance from Family Health International.

As an integral component of the Norplant project initiated by the EFCS in 1988, research was included on the acceptability of Norplant in Egypt, to complement the clinical data on the safety and efficacy of this new method. The acceptability study focused on the clients in the clinical trial in the five university teaching hospitals. This paper discusses the acceptability of Norplant in Egypt, client satisfaction with Norplant services, access to removal, intention to use Norplant in the future, and the recommendation of Norplant to others.

Methodology

The study used both focus group discussions (FGD) and a survey to measure the acceptability of Norplant. The survey was used to quantify behavior and attitudes towards Norplant while the FGDs were used to explore opinions about and reactions to Norplant in more depth. The results of the FGDs cannot be generalized, but they provide a rich complement to the survey data. Table 1 shows the methods used for the study.

Table 1 Norplant acceptability study design, Egypt, 1989

Method	Group	Number
Focus group discussions	Users, initial	10 FGD; 3-11 participants
	Late, continuers < 1 year	5 FGD; 10-13 participants
	> 1 year	5 FGD; 8-10 participants
	Late, discontinuers	5 FGD; 4-5 participants
Field survey	Users, continuers and discontinuers	1351

The acceptability study followed the experience of the EFCS clinical trial participants. It included two series of focus group discussions with users at the beginning of the five-center Norplant clinical trial and one year later, after some users had more than one year of experience with Norplant. Finally, all clients in the clinical trial participated in a field survey.

Table 3 Characteristics of participants in initial FGD on Norplant in five Norplant clinical trial centers, Egypt, 1989

Characteristic	Center				
	Ain Shams	Alexandria	Assuit	Mansoura	Al Azhar
Age (years)	26	30	31	33	31
Range	22-35	25-38	NA	28-38	24-38
Children ever born	4	4	8	4	5
Range	2-6	2-6	NA	2-10	4-6
Education (%)					
Illiterate	95	100	82	67	NA
Literate	5	0	18	33	
Does user work outside home (%)					
Yes	5	0	NA	NA	0
No	95	100			100
Residence					
Urban	100	48	39	60	100
Rural	0	52	61	40	0
No. of participants in FGD	22	25	18	15	NA

Notes: These characteristics represent those of two FGD at each center. For Ain Shams and Al Azhar, both groups were from urban areas. For Alexandria, Assuit and Mansoura, one group at each center was urban and the other group rural.

Results

The EFCS Norplant clinical trial was initiated in 1988 at the five university teaching hospitals (Alexandria, Assuit, Ain Shams, Mansoura, and Al Azhar). Special care was taken to provide training to the health care providers in both technical and counseling aspects of Norplant. Enrollment of the 1537 women ended in September 1989. The acceptability study started in late 1988 with the initial reaction FGD.

Initial FGD with new users

FGD were held with users in each of the five centers in order to study clients' early reactions to Norplant. These participants had used Norplant for between one to six months at the time of the FGD. In three centers clients were divided into urban and rural groups; in two centers clients were homogeneous (all from semi-urban areas) so no division among clients was made [19,20].

The user reactions in this early stage are likely to be very important, as common side-effects frequently occur soon after insertion, when the woman may be anxious and uncertain, and when experience with Norplant is new. Clients may have many questions and the need for strong client-provider relations is greatest at this time. Clients may have complaints about the service delivery system.

Characteristics of the new users

The age of the users ranged from 22 to 38 years, as shown in Table 2. They had between 2 and 10 children, with an average of 4. Most of the participants were illiterate women who did not work outside of the home. Virtually none of them wanted more children.

Knowledge of Norplant

Previous and present Norplant users play an important role in spreading information about the method, and in convincing relatives and neighbors to use it. FGD participants reported that their main initial sources of information about Norplant were users, relatives, neighbors, friends, and family planning clinic staff.

Advantages of Norplant

Almost all of the women had used another method of family planning before trying Norplant - generally the pill or IUD, and switched to Norplant due to the side-effects they had experienced with the previous method. Most were happy that Norplant had relatively fewer side-effects. The women considered the advantages of Norplant to be its long duration of effectiveness, its relative lack of side-effects, its ease of use (it cannot be forgotten like the pill), and its insertion site (unlike the IUD).

Problems encountered with Norplant

After two to six months of experience, the women had few complaints about Norplant. The most common side-effect experienced, as in other studies, was menstrual irregularity, but the women who had experienced amenorrhea generally said that it went away after two months or so. Other side-effects experienced were headaches, dizziness, weight gain or loss, and initial pain at the site of insertion.

Satisfaction with Norplant and services

Most of the women were satisfied with Norplant; only a few women had considered

removal, and they had been dissuaded from doing so. Women who had experienced side-effects said that these were a small price to pay compared to getting pregnant again. The users said they were generally satisfied with the services they had received, although many did complain that the waiting time (sometimes up to two hours) to see the doctor was too long. They were satisfied with the insertion procedures, although many said that the procedure was not fully explained to them. A few of the women mentioned the Norplant booklet they had received. KPCS developed, in collaboration with PATH/PIACT, three information booklets/leaflets for use during counselling, one of which was a user information leaflet in Arabic. The booklet for users was mostly pictorial, geared to illiterate clients [21,22]. Women who experienced side-effects said that they wished the drugs prescribed to alleviate the effects were free of charge since many of them said they could not afford to buy the treatments. Most of the participants mentioned that they would (or already had) recommend Norplant to others.

Follow-up FGD

One year after the initial discussion with users, three sets of FGD were again held in each of the five centers, this time with users of less than one year, users of more than one year, and with discontinuers. The purpose of these FGDs was to get users' opinions after a longer duration of use, and to talk more specifically to discontinuers.

Characteristics of the users

The characteristics of the three groups of users are shown in Tables 3-5. The women were, on average, between 29 and 33, had an average of three to six children, were mostly illiterate (60-100%), lived in either mostly rural or mostly urban areas, depending on the location of the center (Assuit was 90% rural, while Al Azhar in Cairo was 100% urban). Between 80-100% of the women worked at home. The discontinuers had similar characteristics to the users, although they tended to be slightly older, slightly more educated and to have up to one fewer children than the continuers. Most of the users and discontinuers had used a method of family planning prior to trying Norplant.

Satisfaction with Norplant

Reactions to Norplant were similar to those articulated during the initial FGD. Major advantages were Norplant's long duration, its ease of use, that it produced less side-effects than the pill or IUD, that insertion was in the arm rather than in the genital area, and its effectiveness in preventing pregnancy. Women again reported having first heard about Norplant mostly from other users, neighbors, relatives or friends.

Table 3 Characteristics of participants who had used Norplant for less than one year in five Norplant clinical trial centers, Egypt, 1989

Characteristic	Center				
	<i>Ain Shams</i>	<i>Alexandria</i>	<i>Assiut</i>	<i>Mansoura</i>	<i>Al Azhar</i>
Age (years)	29	30	29	35	29
Range	22-35	20-35	22-36	25-38	24-34
Children ever born	4	4	6	5	4
Range	2-6	2-6	3-10	3-7	1-6
Education (%)					
Illiterate	80	91	91	91	NA
Literate	20	9	9	9	
Does user work outside home (%)					
Yes	0	0	0	9	0
No	100	100	100	91	100
Residence					
Urban	90	45	36	18	100
Rural	10	55	64	82	0
No. of participants in FGD	10	11	11	11	10

All of the continuers and most of the discontinuers said they were satisfied with Norplant, with the exception of discontinuers at one center, where the 5 discontinuers in the FGD were not happy with the side-effects from Norplant. Some discontinuers at other centers understood that the problems leading to removal might have been associated with factors not related to the method (e.g. social or cultural). Others said that Norplant was not suited to some women. The majority of users said they had recommended Norplant to others as a good method; some of their relatives, friends and neighbors were already using it, due to their recommendation.

The women in these later FGDs also thought that they were treated well by the family planning clinics. Most women found the insertion to be painless, although they had been worried beforehand. Follow-up care and counselling were considered satisfactory, although going for follow-up was considered onerous, as was waiting if one had to see the doctor. The counselling, both pre- and post-insertion, which had been noted for its deficiencies during the initial FGDs, had definitely improved over the intervening year of the study. Women generally said that the insertion procedure was explained to them and that they understood how to care for the insertion site after insertion.

Table 4 Characteristics of participants who had used Norplant for more than one year in five Norplant clinical trial centers, Egypt, 1989

Characteristic	Center				
	<i>Aln Shams</i>	<i>Alexandria</i>	<i>Assuit</i>	<i>Mansoura</i>	<i>Al Azhar</i>
Age (years)	30	32	30	33	30
Range	25-37	26-40	28-35	25-38	22-33
Children ever born	4	5	5	5	3
Range	2-6	3-6	4-8	2-8	2-4
Education (%)					
Illiterate	77	100	100	89	NA
Literate	23	0	0	11	
Does user work outside home (%)					
Yes	8	0	0	0	0
No	92	100	100	100	100
Residence					
Urban	92	50	33	56	100
Rural	8	50	67	44	0
No. of participants in FGD	13	8	9	9	10

Problems associated with Norplant

The women complained mostly about menstrual irregularities, both excessive bleeding and amenorrhea (for continuers of more than one year and discontinuers). Other complaints continued to be headache, weight gain and loss, weakness, laziness, and hand and leg pain. Social problems were mentioned by some women: one woman thought she could not pray while she was bleeding; another woman's mother-in-law wanted her to have another child but she and her husband did not want one; and one woman complained about the curiosity of her neighbors.

Rumors

It appeared that worries and doubts about Norplant increased between the initial and later FGD, mainly due to the rumors that had been circulating regarding Norplant. Rumors included that Norplant causes cancer; it is under experimentation; it is not effective; it eats bones and skin; it causes diabetes, infertility, paralysis, and heart problems and that it moves around in the body. Interestingly, the main sources of rumors were reported to be doctors outside of the clinics, neighbors, and relatives. Most women discounted the rumors, but they were still worrisome.

Table 3 Characteristics of participants who had discontinued use of Norplant in five Norplant clinical trial centers, Egypt, 1989

<i>Characteristic</i>	<i>Center</i>				
	<i>Ain Shams</i>	<i>Alexandria</i>	<i>Assuit</i>	<i>Mansoura</i>	<i>Al Azhar</i>
Age (years)	33	33	33	31	33
Range	29-36	25-40	29-36	25-38	30-40
Children ever born	3	5	5	4	4
Range	2-5	3-9	2-7	2-4	4-6
Education (%)					
Illiterate	60	83	100	80	NA
Literate	40	17	0	20	
Does user work outside home (%)					
Yes	20	0	0	20	0
No	80	100	100	80	100
Residence					
Urban	100	50	75	20	100
Rural	0	50	25	80	0
No. of participants in FGD	5	6	4	5	5

Discontinuation

Most of the women who had discontinued did so mainly due to menstrual irregularities and headaches. Social reasons included the desire for another child, husband's travel, and divorce. In one case a husband threatened to divorce his wife if she did not remove the implants. Discontinuers were generally satisfied with the removal procedure and counselling, although one woman was angry that the nurse had berated her for having Norplant removed.

It appears that one area of counselling did not improve over the year: post-removal contraceptive use. Most of the discontinuers did not have a contraceptive plan following Norplant; one woman was already pregnant and wished she had not had the implants removed.

Future use

Perhaps the best litmus test for satisfaction of a method is whether a woman would use it again in the future. Most users said they would. Many discontinuers commented that were it not for the side-effects, they would also consider using Norplant again.

Table 6 Selected characteristics of Norplant users in five Norplant clinical trial centers, Egypt, 1989

Characteristic	Center					All centers
	Ain Shams	Alexandria	Assuit	Mansoura	Al Azhar	
Age (years)	32	32	32	33	32	32
Age at marriage (years)	18	18	16	17	18	17
Education (%)						
None	68	77	84	80	64	74
Read/write	16	7	8	8	19	12
Other	16	16	8	12	17	14
Does user work outside home? (%)						
Yes	8	6	9	20	8	11
No	92	94	91	80	92	89
Husband's education (%)						
None	29	42	62	36	42	41
Read/write	38	31	14	37	28	31
Other	33	27	24	27	30	18
Does husband work outside home? (%)						
Yes	98	94	97	98	100	98
No	2	6	3	2	0	2
Living children						
Boys	4.1	4.3	5.2	4.3	3.9	4.3
Girls	2.2	2.4	3.0	2.3	2.1	2.4
Total	1.9	1.9	2.2	2.0	1.9	1.9
Desire for more children (%)						
Yes	7	9	16	5	6	8
No	93	91	84	95	94	92

Survey of users and discontinuers

As a final step in the Norplant acceptability research, a survey of all the clients in the EFCS clinical trial was conducted to supplement and complement the FGD. Users' and discontinuers' reactions to Norplant on a range of topics were quantified, including past contraceptive use, knowledge of Norplant, counselling, problems encountered, removal, and Norplant continuation. A total of 1351 women (88%) were interviewed out of 1537 women in the clinical trial. The survey was conducted in November/December 1989. The average duration of use was 433 days, with a range of use of 9 to 688 days.

Table 7 Contraceptive history among women in five Norplant clinical trial centers, and reasons for discontinuation, Egypt, 1989

Method and reason for discontinuation	Center					All centers
	Ain Shams	Alexandria	Assuit	Mansoura	Al Azhar	
Method(s) used prior to current Norplant*						
Never used	4	9	22	6	4	8
Pill	74	75	70	74	68	72
IUD	50	55	27	59	58	51
Injectables	5	7	9	15	3	8
Condom	1	4	7	2	3	3
Norplant	0	3	8	0	0	2
Other	1	7	9	3	3	4
Main reason stopped using last method						
Wanted pregnancy	0	2	2	0	1	1
Menstrual problem	26	26	24	27	17	24
Other side-effects	42	39	39	32	11	32
Method failure	12	6	12	6	7	8
To use Norplant	15	16	3	27	31	20
Other	4	12	21	9	33	15

*Totals do not sum to 100 since women could have used more than one method of contraception

The characteristics of the women in the survey mirrored those of the women in the focus groups, indicating that the FGD of users and discontinuers were reasonably representative of those enrolled in the clinical trial. Table 6 shows the characteristics of the women surveyed.

Characteristics of the women in Assuit showed the most variation compared to the other centers. The age of the women in each of the five centers ranged between 22 and 33, and their average age of marriage ranged from 16 to 18. Most (74%) of the women had no education; the husbands tended to be more educated than their wives. In only one center (Mansoura) did more than 20% of the women work outside of the home, whereas virtually all of the husbands (98%) had jobs.

Women in Assuit had the most living children, 5.2, compared to 3.9 in Al Azhar and just over 4 children in the three other centers. Eighty-four percent of the women in Assuit said they did not want more children, compared to over 90% of the women in the other centers.

Table 8 Main reasons for selecting Norplant over other methods of contraception, for women in five Norplant clinical trial centers, Egypt, 1989

Reason	Center					All centers
	Ain Shams	Alexandria	Assuit	Mansoura	Al Azhar	
Norplant lasts longer	61	11	10	16	46	30
Not satisfied with other method	11	31	22	22	11	19
Ease of use	6	9	1	4	8	6
Cannot forget	8	7	11	11	15	11
Advice of neighbors, friends or relatives	4	25	31	17	8	16
Fewer side-effects	4	7	4	21	2	8
Advice of doctor	4	8	6	9	6	7
Other	5	9	19	21	6	12

Previous use of family planning

In Egypt it appears that Norplant, at least initially when it is introduced, may be a method of choice for women who have tried other methods of family planning and have experienced difficulty in using them. Over 90% of the women in centers other than Assuit had used another method of contraception before trying Norplant (Table 7).

Most women stopped using the method they were using prior to Norplant due to menstrual problems and other side-effects, although one-fifth of the women stopped specifically to try Norplant.

Information about Norplant

In all centers, the initial sources of information about Norplant were neighbors, friends, relatives, and doctors. Nearly three-quarters (72%) of the women had known someone who was using Norplant.

Women varied in their main reason for choosing Norplant (Table 8). Reasons include that Norplant lasts longer (30%), that they were not satisfied with their previous method (19%), that they had been advised to do so by neighbors, relatives or friends (16%), and that Norplant is easy to use (11%).

Women seemed to feel they received sufficient information about Norplant from the family planning clinics. With the exception of Assuit, over 85% of the women said that someone at the clinic had explained Norplant to them. Virtually all (96%) of the women knew that Norplant works to inhibit fertility for five years.

Table 9 Main problem caused by Norplant, for women in five Norplant clinical trial centers, Egypt, 1989

Reason	Center					
	Ain Shams	Alexandria	Assuit	Mansoura	Al Azhar	All centers
Did Norplant cause a main problem?						
Yes	67	76	50	49	46	57
No	33	23	50	51	54	43
If yes, what was the main problem encountered?						
Menstrual	67	62	52	57	66	62
Other medical	32	37	48	42	31	37
Other non-medical	1	1	0	1	3	1

Problems encountered with Norplant

More than half of the women in the clinical trial experienced problems with Norplant (Table 9), including menstrual irregularities (62%), and other medical problems (37%). Only 1% said that the main problem they encountered was non-medical.

Discontinuation of Norplant

At the time of the acceptability survey, 13% of the respondents had requested removal and 7% of the women had actually had the implants removed (see Table 10). The others were generally reassured that the side-effects they experienced were not serious, or would diminish with time.

Women requested removal generally because of menstrual or other medical problems (44% and 37%, respectively). Four percent each wanted to get pregnant or cited other social problems as their reasons for discontinuation. Although a higher percentage of women from Assuit said they wanted more children (Table 6), the highest percentage of women who actually discontinued due to a desire for more children were from Al Azhar. Otherwise, personal or social problems were a small factor in discontinuation.

Table 10 Removal experiences of Norplant, for women in five Norplant clinical trial centers, Egypt, 1989 (%)

Items	Center					
	Ain Shams	Alexandria	Assuit*	Manwoura	Al Azhar	All centers
Removal request						
Yes	10	18	15	16	15	13
Number	280	236	218	322	295	1351
Main reason for wanting removal						
Menstrual disturbance	32	49	46	43	53	44
Other medical	43	35	41	40	13	37
Desired pregnancy	7	5	3	0	13	4
Other personal	4	2	3	6	0	4
Other	14	9	8	10	20	11
Number	28	43	37	48	15	172
Were capsules removed at first request?						
Yes	36	16	11	10	67	21
Number	28	43	38	48	15	173
Why not removed at first request?						
Encouraged to continue	39	16	27	25	20	25
Doctor not in	39	33	6	7	20	18
Told to come back if symptoms not improved	22	19	15	33	60	24
Took medicine for side-effects	0	11	35	23	0	19
Other	0	19	18	12	0	13
Number	18	36	34	43	5	136
Did you feel pressure to keep it?						
Yes	22	11	24	12	20	16
Number	18	36	34	43	5	136
Who decided on removal?						
Self	76	50	57	59	86	64
Husband	18	14	0	5	7	8
Both	0	18	10	14	0	9
Doctor	6	14	24	9	0	11
Other	0	4	10	14	7	7
Number	17	22	22	22	15	97

Items may not sum to 100 due to rounding

*In Assuit, there were seven discontinuers who did not request removal; they were advised by the doctor to discontinue for medical reasons. These seven cases are included in the 'other' category for removal request, and are included in the remainder of Table 10

Most women themselves made the decision to discontinue, although husbands and doctors tended to be involved in decisions regarding discontinuation. While most of the women had to wait after their initial request for the removal to be done, the majority of women at all centers reported that they were not pressured to keep the Norplant against their wishes.

Satisfaction with Norplant

With the exception of Assuit, over 90% of the women surveyed in each of the centers said they were satisfied with Norplant (Table 11). In Assuit, 87% of the women expressed satisfaction with Norplant. Again, with the exception of Assuit, over 90% of the women were satisfied with the service they had received. In Assuit, 85% of the women were satisfied with the service. Most women (79%) reported going to the clinics on their scheduled dates for follow-up; of those who do not go on time, most said that it takes too long to get to the clinic and wait to receive service.

Continuation and future use of Norplant

When asked if they would consider using Norplant in the future, an average of 67% said they would, and an additional 22% said they were not sure. Most of the women (89%) mentioned that they would advise others to use Norplant.

Discussion

Norplant appears to be as acceptable in Egypt as it is in other countries, at least among the group of women under study. The participants in this study were women mostly in their thirties who had an average of four children. Most of them had used a method of family planning before Norplant, and were eager to maintain contraceptive protection as most wanted no more children. These women were motivated family planning users, who had already decided before enrolling in the study that they wanted to practice family planning.

It could be that the acceptability of Norplant will not be as high among the general population once the method has spread into the national population program, but results from these acceptability studies suggest an important role for this long-term method. Centers in the EFCS study reported that women still came asking for Norplant insertion one year after enrollment in the clinical trial was completed. Some women in the FGD recommend that Norplant be made available in rural areas as soon as possible. Nearly three-quarters (72%) of the women said they would be willing to pay for Norplant, with suggested prices ranging from 0-400 LE, and a median price of 5 LE (\$1 = 3.3 LE).

Table 11 Satisfaction with Norplant and service received, for women in five Norplant clinical trial centers, Egypt, 1989 (%)

Item	Center					All centers
	Ain Shams	Alexandria	Assuit	Mansoura	Al Azhar	
General satisfaction with use of Norplant	94	91	87	93	99	93
Overall satisfaction with the services provided by the clinic	90	89	85	98	99	93

The FGD and surveys found similar results: satisfaction with Norplant among users was high. In the survey, 93% of the women expressed satisfaction with the method. More than half (67%) of the women said they would consider using Norplant again in the future, and another 22% were undecided. Eighty-seven percent of the women who had not discontinued were planning to continue with their current Norplant set for the full five years.

Norplant is liked by the women in the clinical trial because of its long duration, the site of insertion, its ease of use, and its relative lack of side-effects compared to the pill and IUD. Egypt is a country where a reliable, long-term, but not permanent method of contraception is needed, as is a method that has less perceived side-effects than the IUD and is easier to use correctly than the pill. Norplant has both of these characteristics; as such it should become a popular method of family planning in Egypt.

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Resumé

Actuellement, la pilule et le dispositif intra-utérin représentent 83% des moyens contraceptifs utilisés en Egypte (EDHS, 1989). Norplant apportera un complément important à ces méthodes de planning familial. En Egypte, où les femmes sont très jeunes en âge de procréer et où les grossesses se succèdent généralement à intervalles très rapprochés, la longue durée et l'efficacité de Norplant ainsi que la facilité relative de son utilisation devraient être attrayantes. L'association égyptienne qui s'occupe des questions de fécondité (EFCS) a entrepris en 1988 une étude sur l'acceptabilité de Norplant en Egypte. Cette étude porte sur des patientes qui se sont soumises à un essai clinique parrainé par l'EFCS dans cinq hôpitaux universitaires.

Les femmes participant à l'essai clinique étaient toutes âgées de 30 à 40 ans et avaient en moyenne quatre enfants. La plupart avaient fait appel à une méthode de planning familial avant d'utiliser les implants et souhaitaient continuer à bénéficier d'une protection contraceptive car elles voulaient, pour la

plupart, ne plus avoir d'enfants. Les utilisatrices de Norplant ont témoigné d'une très grande satisfaction. Au cours de l'enquête, 93% des femmes se sont dites satisfaites de la méthode. Plus de la moitié (67%) ont précisé qu'elles envisageraient d'utiliser Norplant dans l'avenir, alors que 22% n'en étaient pas absolument certaines. De celles qui n'avaient pas abandonné la méthode, 87% prévoyaient de continuer à utiliser leur série courante de Norplant pour la période complète de cinq années.

Les femmes égyptiennes aiment Norplant en raison de la longue durée d'efficacité, du site d'insertion, de la facilité d'utilisation et de l'absence relative d'effets secondaires perçus, par comparaison avec la pilule et les DIU. En Egypte, où il est absolument nécessaire de pouvoir compter sur une méthode de contraception fiable, à long terme mais non permanente, Norplant devrait devenir une méthode populaire de planning familial.

Resumen

La píldora y el DIU representan actualmente el 83 por ciento de la utilización de anticonceptivos en Egipto (EDHS, 1989); el Norplant será un complemento importante de los métodos de planificación familiar utilizados. En Egipto, donde se comienza a tener hijos a edad temprana y los embarazos con poco intervalo entre sí son lo habitual, la duración prolongada de la eficacia del Norplant y su relativa facilidad de uso habrán de ser características atractivas. La Asociación de Atención de la Fecundidad en Egipto (EFCS) inició en 1988 un estudio sobre la aceptabilidad del Norplant en Egipto a fin de examinar la clientela del ensayo clínico de la EFCS en los cinco hospitales escuela universitarios.

Las participantes del ensayo clínico eran mujeres de edad comprendida entre los treinta y cuarenta años que tenían en promedio cuatro hijos. La mayoría había utilizado un método de planificación familiar antes del Norplant y tenía gran interés en mantener la protección anticonceptiva ya que no deseaba tener más hijos. Las mujeres manifestaron un alto nivel de satisfacción con el Norplant. En el estudio, el 93 por ciento de las mujeres se mostraron satisfechas con el método. Más de la mitad (67 por ciento) de las mujeres dijeron que considerarían volver a utilizar el Norplant en el futuro y el 22 por ciento de las mujeres se mostraron indecisas. El 87 por ciento de las mujeres que no habían interrumpido el uso proyectaban continuar con su actual Norplant durante el período completo de cinco años.

A las mujeres egipcias les agrada el Norplant por su prolongada duración de eficacia, el lugar de inserción, su facilidad de uso y su relativa falta de efectos secundarios advertidos en comparación con los de la píldora y el DIU. En Egipto, donde se necesita en gran medida un método anticonceptivo fiable, de larga duración pero no permanente, el Norplant podría llegar a ser un método popular de planificación familiar.