Visaria, Leela.: The Quality of Reproductive Health Care in Gujarat: Perspectives of Female Health Workers and Their Clients. : In Improving Quality of Care in India's Family Welfare Programme edited by Michael A. Koenig and M.E. Khan. Population Council. 1999. p.143-168. ISBN 0-87834-099-8.

The Quality of Reproductive Health Care in Gujarat: Perspectives of Female Health Workers and Their Clients

Leela Visaria

In recent years there has been a growing concern in many countries, including India, that public health and family planning programs have placed insufficient emphasis on the quality of their services (Ickis 1992; Khan et al. 1994; Mensch 1993; Miller et al. 1991). The emphasis has too often been on the nominal fulfillment of quantitative targets. In countries such as India, poor service quality and inadequacies in the array of services are believed to be largely responsible for low levels of program use (Bruce 1990; Visaria and Visaria 1992). Poor service quality is also held responsible for low continuity of contraceptive use. Thus the constraint is not in the supply of contraceptives, but rather in the provision of services to people. An improvement in the quality of services is expected to result in a greater and sustained use of family planning.

Quality of care has several dimensions or components (Bruce 1990; Jain, Bruce, and Kumar 1992). One of the most crucial quality- of-care elements in the provision of reproductive health services is the auxiliary nurse-midwife (ANM), or female health worker (FHW) as she is now known in many parts of India. [1] As service providers, ANMs come into direct contact with the service users, yet the role and functions of these service providers and their interactions with clients have been a neglected area of research (Simmons et al. 1988; Simmons and Elias 1994). We do not adequately understand the hindrances they face from all quarters-superiors, other health staff, the community, and clients-in discharging their duties or providing services with a satisfactory quality of care. In spite of their considerable experience, their views on the kinds of services, priorities, and needs of the people are not taken into consideration by those who design programs and assign their duties. This chapter discusses the role and functions of ANMs as perceived mainly by the workers themselves, but also by their clients, and suggests ways to improve the health care delivery system.

Data Sources

Four interrelated data sets, collected from surveys conducted under the auspices of the Gujarat Institute of Development Research, Ahmedabad, in rural areas of Gujarat State between 1989-90 and 1995, form the basis of the profile of the ANMs presented here. They are analyzed to develop a perspective on the nature of the ANMs' work, the constraints they face, and their perceived priorities.

The first data source is a survey of a random sample of 9,600 rural households from 192 villages drawn from four districts of Gujarat in 1989. The respondents were asked questions about their contact with ANMs for antenatal care, curative care, and family planning services; the quality of services provided by the health workers; and the respondents' satisfaction with the services. The data indicate the extent to which the health workers were accessible and responsive to the rural people.

The second source is a survey, also conducted in 1989, of 173 ANMs linked to the 192 villages. As a part of the study that produced the first data source, we sought information from the health workers about the problems they faced in delivering health services, their perceptions of the problems, and possible ways to overcome the difficulties. Data were also collected on the socioeconomic background of the workers, their workload, the type and extent of logistic support available to them, their knowledge and understanding of their tasks, and the record-keeping system maintained by them.

On the basis of the records of acceptors maintained by the ANMs working in the villages surveyed in 1989, in 1991 we selected 1,035 current acceptors of family planning methods. These were women whose names had been recorded on the registers of ANMs as recipients of family planning services during the two calendar years 1989 and 1990. This additional survey was undertaken to ascertain the users' satisfaction with the services and service providers; it incorporated a detailed set of questions on the quality of care provided to the users of various methods of family planning. The survey of users was conducted in 22 villages from two of the four districts surveyed earlier. Of the 1,035 women selected for interviews, only 692, or 67 percent, could be contacted. The remaining 33 percent could not be interviewed because they were away from their village at the time of the interviews, could not be traced, or their names were shown against more than one family planning method. Only five women refused to be interviewed (Visaria, Visaria, and Jain 1994).

The fourth data source is qualitative and is based on group discussions with both ANMs and multipurpose male health workers in 1994 and early 1995 in some of the same villages that had been surveyed in 1989 and 1991. Focus-group discussions and in-depth interviews were also conducted and tape-recorded with acceptors of sterilization. They provide a perspective on the extent to which family planning activities receive priority over the other health care activities in the program. This qualitative information is partly anecdotal, but it reflects the perceptions of women clients and health workers and has helped us to interpret the quantitative data.

In profiling ANMs and their perspectives on the health and family planning program, I shall first examine the data on the socio-demographic characteristics of the workers, the logistic support received by them, their job responsibilities, and the support they received from the community. Next I shall examine their interactions or contacts with the clients and present data on the service users' perceptions of the quality of care provided by the health workers. These various perspectives are expected to broaden our understanding of the crucial role of the health workers in service delivery in rural India.

A Profile of the ANM

The task of contacting all ANMs in the 192 villages included in the 1989 study proved challenging. [2] A significant number of the ANMs could be contacted only after a second or even a third visit. The information presented here pertains to 173 ANMs. We contacted them at their subcenters or at their place of residence, rather than at the primary health centers (PHCs) during their monthly meetings. The rationale was that at the PHCs they were generally busy attending meetings and were with other health staff and therefore may not have had the time or may not have been willing to talk freely.

As shown in Table 8.1, four-fifths of the health workers were above age 25. In two districts, however, nearly a quarter of the workers were under age 25 and presumably less experienced (data not shown). Three-fourths were currently married, although every district had some unmarried health workers. If such women were not "daughters of the village," ensuring their safety and security in the subcenter villages appears to have been a serious problem. Overall, more than four-fifths of the health workers had been working as ANMs for four or more years.

Table 8.1: Demographic and socioeconomic profile of ANMs: Four rural districts of Gujarat, 1989-90

Characteristic	Average, all districts	Range	Characteristic	Average, all districts	Range
Age in years			**Residential pattern (%)**		
Mean age	30	27-33	Living in subcenter village	71	48-93
< 25 (%)	17	9-25	Not provided government accommodation	35	12-73
25-34 (%)	48	39-52	Provided government accommodation and live in it	30	18-52
35+ (%)	35	22-41	Provided government accommodation but do not live in it	6	2-12
Marital status (%)			Living outside subcenter village	29	7-52
Never married	16	8-19	Not provided government accommodation	20	7-37
Currently married	77	70-85	Provided government accommodation	9	5-20
Widowed, divorced or separated	8	5-11	**No. of hamlets or villages in jurisdiction (%)**		
Years of service			Subcenter village only	26	19-42
Mean no.	8	6-9	2-3 villages	41	27-61
< 3 (%)	16	10-27	4+ villages	33	18-54
4-5 (%)	35	23-58	**Mode of transport used to visit villages (%)**		
6-10 (%)	29	18-42	Walking	69	65-73
11+ (%)	20	10-25	Public transport	28	24-34
Caste or religion (%)			Others	4	2-9
Upper Hindu castes	24	7-40			

Lower Hindu castes	45	12-84	
Scheduled castes	5	0-15	
Scheduled tribes	13	0-31	
Muslim	6	0-12	
Christian or others	6	2-14	

Note: Percentages may not add to 100 because of rounding
ANM = auxiliary nurse-midwife

The caste composition of the health workers was, by and large, similar to the composition of the population in each district. In the nontribal districts, most workers were drawn from the low Hindu castes. In the tribal districts, nearly half of the ANMs were tribal or belonged to scheduled or low Hindu castes. Interestingly, nearly a quarter of the health workers belonged to the upper castes. The prospect of a regular and relatively attractive salary, as well as the need to supplement the family income, seemed to have prompted high-caste Hindu women to enter this profession, which until recently was pursued mainly by Christians or low-caste Hindus. All but one of the health workers were fluent in Gujarati, although a few of them had come from outside Gujarat. While interacting with people living in rural areas who had little knowledge of any other Indian language, these workers had acquired adequate knowledge of written and spoken Gujarati.

A major issue relating to the efficacy of health care delivery is whether the ANM resides in the subcenter village and is easily accessible to the people. This is often said to be a necessary condition for effective delivery of health services. Overall, more than 70 percent of the ANMs in our sample resided in the subcenter villages to which they had been assigned. [3] An additional 13 percent of the ANMs lived within three kilometers of their subcenters. Eleven of the 173 ANMs lived more than 12 kilometers away from their subcenters. For those ANMs who stayed in villages or towns removed from their subcenters or in other villages under the subcenters' jurisdiction, their accessibility to the population appeared problematic. There were, however, significant differences in living arrangements between districts. Nearly 85 percent of the health workers in the tribal district of Bharuch lived in the subcenter village, but only 48 percent of those in the other tribal district of Panchmahals did so. The difference between the other two districts was also striking. In Rajkot District, 41 of the 44 ANMs interviewed lived in the subcenter village, whereas in Kheda District more than a third of the

ANMs lived outside their area of jurisdiction and commuted to their subcenter area.

Some of the health workers who were provided accommodation chose not to stay there and instead either rented houses within the village or stayed in their own homes, if they owned a house in the subcenter village. Among the reported reasons for not staying in the subcenter building were its dilapidated condition and its location outside the village proper. The non-occupancy contributed to a further deterioration of the buildings in most cases; some of them were even vandalized. Given the paucity of maintenance funds, these buildings cannot easily be made usable.

In the villages that did not have a subcenter building, the health workers had to find a dwelling either within the subcenter village or elsewhere. In Rajkot District most of the subcenters did not have their own building; nevertheless, nearly 73 percent of the health workers were reported to be staying in the subcenter villages, either renting accommodations or living in their own houses. (It is not clear whether the health workers in Rajkot were recruited locally or an effort was made to place them in their places of origin.) Otherwise, the willingness of the health workers to find accommodation in the subcenter villages and to live there is commendable. The situation in Panchmahals and Kheda Districts, with a high percentage of the health workers living outside the subcenter villages, posed a problem for residents, who had limited access to the workers.

Throughout the Family Welfare Programme, health workers are assigned the task of providing services to a population of about 5,000 in nontribal areas and about 3,000 in the tribal areas. In areas or districts where the average size of villages is small, this norm often implies that the health workers must provide services to more than one village. In large villages, such as those in Kheda District, more than one health worker is assigned to a single village. Among the health workers we surveyed, each was assigned an average of 2.8 villages, but 26 percent of the ANMs had to cover only the village in which their subcenter was located. Most of the other villages were near the subcenter village and situated at an average distance of 3.5 kilometers from the subcenter.

Among the four districts, variations in village size led to differences in the number of villages to be covered by the ANMs and in the distance to be traveled to reach them. Given the relatively large size of villages in Kheda District, about 41 percent of the health workers there served only their subcenter village; in the

other districts, the corresponding figure was only about 20 to 25 percent. The tribal villages tend to have small populations; therefore, in spite of being assigned smaller populations, almost four-fifths of the health workers were required to provide services to two or more villages. The somewhat difficult terrain, inclement weather, and inconvenient public transportation facilities posed problems of effective coverage. A majority of the health workers reported that they generally walked to the villages under their jurisdiction, and only about a quarter of them used public transportation.

Logistic Support Received by Health Workers

To assess the availability of support services to the health workers, we asked them questions about the physical facilities and equipment they had been provided. As Table 8.2 indicates, nearly nine-tenths of the workers functioned from buildings provided to them. An exception was in Rajkot District, where more than a third of the health workers operated from their own homes. Typically, a health worker is provided with certain equipment and supplies; she also requires some privacy when meeting with clients. Having to function from her own home poses serious problems for her in taking care of the equipment and providing adequate and private access to clientele.

Table 8.2: Logistic support received by ANMs: Four rural districts of Gujarat, 1989-90

Type of support	Average, all districts	Range
Physical facilities (% of subcenters)	58	33-81
Subcenter's own building	30	10-46
Rented by or donated to subcenter	12	3-37
None-functioning from ANM's residence		
Equipment in working condition (% of subcenters)	60	50-75
Examination table	34	22-52
Blood-pressure instrument	38	27-65
Stethoscope	58	38-90
Weighing machine for adults	81	65-92
Delivery kit	33	12-50
Delivery pack		

Basic supplies in stock (% of subcenters)	57	42-82
Basic curative medicines	95	88-100
Iron and folic acid tablets	82	58-98
ORS packets	83	70-91
Cotton	36	18-65
Kerosene, fuel oil	52	10-82
Chemicals for hemoglobin test		

ANM = auxiliary nurse-midwife; ORS = oral rehydration solution

When we asked the health workers whether their equipment was in usable condition, a majority reported that vaccine carriers, stoves, test tubes, and similar items were generally in working order. However, we observed that in most of the subcenters, those items were lying idle or unused, often in the cartons in which they had been delivered. The immunization program, as it is being implemented, does not require the ANM to be equipped with a vaccine carrier or related equipment. Lady health visitors (LHVs), assisted by male health workers, bring the vials of vaccines from the PHCs directly to the ANMs in the villages.

With the exception of Bharuch District, however, fewer than 30 percent of the ANMs reported that the equipment they used on a regular basis to provide antenatal care was in working order. That equipment included blood-pressure instruments, stethoscopes, and weighing machines for adults. The family planning program has provided basic equipment to most subcenters but has not been able to provide small maintenance budgets or regular supplies such as chemicals or kerosene, which are needed to operate some of the equipment. We found, for example, that even if a hemoglobin meter was in working condition, the lack of basic chemicals prevented health workers from using the equipment to check for anemia in pregnant women. Consequently, antenatal care consisted of giving pregnant women iron and folic acid tablets, which were available in adequate quantities most of the time, and providing them with verbal reassurance. Most of the health workers also reported having adequate stocks of oral rehydration solution, intended for treating diarrhea among infants and children, although the workers indicated that they rarely used them. [4] However, 43 percent of the ANMs said they were not provided adequate quantities of basic curative medicines. The situation with regard to the availability of drugs was much better in Rajkot District than in the other three districts.

The shortage of basic medicines was due in part to villagers' demands for remedies for minor ailments, such as stomachache and diarrhea. The health workers could not easily deny them the medicines for fear of losing support for the Family Welfare Programme. Some workers even reported to us that they used their own money to buy basic drugs for the villagers.

Family Planning Activities

It is well known that health workers spend a major portion of their time on activities associated with meeting the family planning tar- gets assigned to them. The health workers are trained in intrauterine device (IUD) insertion and in advising women about the advantages and risks associated with oral contraceptives. Practically all the ANMs surveyed by us reported that they had received training in IUD insertions; a large majority of them said they could actually insert IUDs without assistance from the LHVs (Table 8.3). Only in Kheda District had some of the recent recruits not received the necessary training. The average number of IUDs that the ANMs reported having inserted in the year prior to the survey, if accurate, was quite impressive, ranging from a low of 16 in Panchmahals District to a high of 38 in Rajkot. We subsequently learned that the average of 25 IUD insertions reported by the ANMs corresponded to the yearly targets assigned to them. [5]

Table 8.3: Indicators of the availability of IUDs and oral contraceptives form ANMs: Four rural districts of Gujarat, 1989-90

Method and indicator	Average, all districts	Range
IUDs	95	92-100
ANMs reporting having been trained in IUD insertion (%)	87	64-98
ANMs reporting the ability to insert IUD themselves (%)	25	16-38
Average no. of IUD insertions in the year preceding survey	94	87-100
ANMs reporting having a stock of IUDs (%)		
OPs	54	32-100
ANMs having an OP checklist and able to produce it (%)	41	34-67
ANMs having an OP checklist but not able to produce it (%)	5	3-15
ANMs not having an OP checklist (%)		
ANMs reporting that pills could be given to all women who want to delay pregnancy (%)	37	5-72

ANMs reporting specified contraindications for pills (%)	17	10-30
Woman's age >35 years	14	4-32
Woman is pregnant	57	44-72
Woman has high blood pressure	19	6-35
Woman suffers from any disease		

ANM = auxiliary nurse-midwife; IUD = intrauterine device; OP = oral pill

Until recently, the Indian government did not make oral contraceptives available on a large scale. Consequently the targets for them have not been as high as those for other methods, such as IUDs and condoms. Almost all the health workers we surveyed reported that they prescribed the pills only after examining prospective users. The ANMs were provided with a checklist of conditions under which pills should or should not be prescribed. In Bharuch and Panchmahals Districts, we attempted to verify whether health workers had the check- list with them and could produce it. In Panchmahals District, only about a third of them could show it to us. When asked about the specific conditions when oral pills should not be given, nearly 20 percent gave vague responses such as "when a woman suffers from any disease." A sizable proportion of the ANMs reported that pills were contraindicated when a woman suffered from hypertension. While the checklist prescribed that women above the age of 35 should not take oral pills, only 17 percent reported that factor as contraindicative for oral pills.

Table 8.4 indicates an impressive level of achievement by the health workers in fulfilling their method-specific family planning targets. Having to persuade more than 80 new couples every year to adopt a family planning method is no small task. However, elsewhere it has been demonstrated that the fulfillment of targets with regard to reversible methods is largely exaggerated in Gujarat (Visaria, Visaria, and Jain 1994). The monitoring system is such that if the health workers do not report an acceptable level of performance, they are reprimanded at their monthly meetings and threatened with the with-holding of an annual salary increase or even a transfer to a new location (which is usually seen as a punishment). They all get the message and learn to report "correct" numbers.

Table 8.4: Average number of family planning clients per ANM reported for the year preceding survey, by method accepted: Four rural districts of Gujarat, 1989-90

Method	Average, all districts	Range
Condom	37	21-59
IUD	26	16-39
Female sterilization	12	7-17
Pills	12	6-20
Vasectomy	0	0-1
All methods	87	56-120

ANM = auxiliary nurse-midwife; IUD = intrauterine device

Another facet of the targets for the health workers relates to the government's system of compensating for poorly performing PHCs by assigning higher targets to the better performing PHCs within the same districts. A similar process of compensation with better performing districts presumably occurs at the state level. The interdistrict variations can be quite large, as is evident in Table 8.4. During our discussions with health workers, we learned that the health workers of the better performing PHCs in Bharuch District resented having been given 20 percent higher targets because other PHCs in their district were not up to the mark. This issue is not a serious one in reality, except that the incremental targets are also method-specific and imply that the ANMs have to persuade a few additional couples to accept sterilization. Compared with other methods, sterilization records are difficult to forge. It is our observation that official figures on sterilization acceptors correspond closely to the actual numbers of acceptors of this method (see Visaria, Visaria, and Jain 1994). AS far as the other methods are concerned, it is an open secret that their fulfillment exists only on paper.

Prioritization of Activities

In Bharuch and Panchmahals, we asked health workers to rank their main tasks, or activities, according to their own priorities and the priorities of their supervisors. (This question was not posed in the other two districts.) The activities listed were maternal health, immunization of children, family planning, and maintenance of registers. Almost none of the health workers thought that the maintenance of registers was an activity that could be compared with the other three, and therefore most did not rank it. In response to several questions about record-keeping, a majority of them stated that the task was tedious and took up a

lot of their time, but that they managed to maintain up-to-date records with the help of the LHVS, their supervisors. In fact, the major function of the supervisors is to assist health workers in preparing information sheets for the monthly meetings at the PHCs.

The health workers ranked their supervisors' priorities on the basis of the emphasis placed on various activities at the monthly meetings attended by the ANMs at the PHCs. On the one hand, according to the health workers, 69 percent of the supervisors (80 percent in Bharuch District and 57 percent in Panchmahals District) placed top priority on family planning work, and only 15 percent of them assigned first rank to maternal health (Table 8.5). On the other hand, 76 percent of the ANMs themselves felt that maternal health should receive top priority, and only 7 percent felt that family planning should receive top priority. Many of them even stated that if mothers and children received good health care, there would be no need to emphasize family planning because women would seek family planning services on their own.

Table 8.5: ANMs ranking of their tasks according to the priorities of their supervisors and their own priorities: Bharuch and Panchmahals Districts, Gujarat, 1989-90

Source of priority and task	**Percentage of ANMs ascribing specified rank (both districts)**		
	1st rank	**2nd rank**	**3rd rank**
Supervisors	15	27	58
Maternal health	20	56	24
Immunization	69	17	14
Family planning			
ANMs	76	20	4
Maternal health	22	63	16
Immunization	7	15	78
Family planning			

Note: Percentage may not add to 100 because of rounding

ANM = auxiliary nurse-midwife

Health workers' perspectives on their supervisors, their views about their own responsibilities, and the quality of care provided to the service users can be better understood in the context of the views and opinions of the service users themselves. The next two sections address those issues by reviewing the responses of clients.

Clients' Contacts with Health Workers and Subcenters

In the survey of village women conducted in the four districts of Gujarat in 1989, we asked respondents whether workers had visited them to offer various services. Their responses were affected by their ability and willingness to recall events that had occurred up to six months preceding the survey. Even so, the responses indicate the extent of contact between the health workers and the rural population and the availability of various health services to rural women.

Table 8.6 summarizes the responses to questions about whether the health functionaries had offered respondents antenatal and natal care. Overall, nearly three-fourths of the respondent women indicated that they had been visited by a FHW or a male health worker during the six months prior to the survey. Health workers making regular visits to the villages have become a familiar sight in Gujarat, and most respondents said they were able to recognize the ANM. [6] We found some interdistrict variations in the reported visits of the ANMs, however. In the tribal district of Bharuch, where a relatively high proportion of respondents (55 percent) reported using contraception, 61 percent said they had been recently visited by a female or male worker. In Panchmahals District (which has a contraceptive use rate of 36 percent), despite the dispersion of villages over a large area, the scattered housing pattern within villages, and the fact that many of the surveyed villages did not have a health worker living within their borders, nearly 70 percent of the respondent women reported a recent visit by a health worker. We had expected the respondents from that district to report low contact with the health staff. It is quite likely, however, that the lower acceptance of family planning in Panchmahals has led health staff to make more frequent visits there. Although direct evidence is not available on this issue, other data presented in Table 8.6 corroborate this hypothesis.

Table 8.6: Contact of respondent households with health workers and utilization of health services: Four rural districts of Gujarat, 1989-90

Type of contact	Percentage of women reporting, contact

	Average, all districts	Range
Households reporting visit in six months preceding survey, by type of worker	73	61-93
ANM	72	61-85
Male health worker	2	0-4
LHV		
(No. of household)	(9,471)	(2,329-2,399)
Women reporting contact with ANM during current [A] ***or last pregnancy***	48	29-66
Last pregnancy registered with ANM	38	26-48
Current pregnancy registered with ANM	45	25-60
Tetanus toxoid injections received during last pregnancy	13	10-16
Tetanus toxoid injections received during current pregnancy	31	20-47
Hemoglobin checked during last pregnancy	42	26-58
Iron and folic acid tablets received during last pregnancy	5	1-12
Assistance by ANM during delivery at home		
(No. of women)	(8,461)	(1,823-2,449)

ANM = auxiliary nurse-midwife; LHV = lady health visitor

[A] At the time of the survey.

In spite of regular visits to the villages by the ANMs, fewer than 30 percent of the women of Panchmahals District reported having received tetanus toxoid (TT) injections or iron and folic acid tablets, while the corresponding figure was more than 40 percent in the other three districts (data not shown). Evidently the visits of the health workers in Panchmahals were not related to the provision of antenatal care. It is probable that the ANMs sought to recruit family planning "cases", even though they believed that maternal health should receive top priority in the list of their activities.

For natal care, most women in rural areas seek the help of a local dai (traditional birth attendant) if they anticipate no complications during delivery, or go to a

private doctor or nursing home or to a government hospital in a nearby town if they or the dai anticipate complications. A majority of the respondent women in the four Gujarat districts were not even aware that their ANM could be contacted to assist in deliveries. In Rajkot District, 12 percent of respondents who had delivered their children at home had called upon an ANM for assistance at the time of delivery, but in the other three districts fewer than 3 percent of the women reporting a birth said they had received assistance from an ANM during delivery. Many respondents felt that a nurse who did not stay in the village could not be called or put to inconvenience and would not come even if called.

A high proportion of ANMs, when asked about the number of deliveries they had assisted reported having a much greater role in natal care than was suggested by the respondents. During our focus-group discussions, however, the health workers mentioned concerns about their personal safety when called at night, the antagonism of some villagers or communities directed toward them, and the risks involved when called to attend a complicated delivery. The health workers preferred not to attend deliveries and believed that the local dais were best suited for the task. Perhaps they mentioned assisting at deliveries because it was one of the tasks assigned to them, and mentioning it improved their service record.

Quality of Care Provided to Women Sterilization Acceptors

A major responsibility of health workers is to motivate couples to adopt a family planning method and provide the necessary services, which range from taking women to the sterilization camps at PHCs or government hospitals to bringing them back and providing follow-up care. For users of reversible methods, the health workers are expected to provide supplies (condoms and oral pills) and services (e.g., IUD insertions).

Our information on the dimensions of quality of care provided to sterilized women is derived from the 1989 survey of women in the four Gujarat districts and from the follow-up survey of acceptors in the two tribal districts of Bharuch and Panchmahals during 1991. The latter group had accepted family planning methods in the calendar years 1989 and 1990 and were reported to be using either the accepted methods or some other method at the time of the survey. Some questions were similar in the two surveys, but the later survey included additional questions. Table 8.7 presents databased on the four-district survey and Table 8.8 presents data from the follow-up survey in two tribal districts.

Table 8.7: Contact of sterilized women with health workers and services received: Four rural districts of Gujarat, 1989-90

Type of contact or service	Percentage of sterilized women reporting contact or service	
	Average, all districts	Range
Informed about other family planning methods by health workers	10	3-18
Received TT injection prior to sterilization	96	94-98
Surgery performed at	49	37-60
PHC or PHC camp	45	35-60
Government hospital	6	4-10
Private hospital or other		
Motivated to accept sterilization by	41	36-50
Self	29	20-39
Female health worker	14	12-18
Other health worker (male health worker, PHC doctor, or other)	16	13-21
Other (teacher or revenue official)		
Received follow-up care from ANM according to who motivated respondent to accept sterilization	41	36-57
Self	60	50-80
ANM	55	35-74
Other health worker (male health worker, PHC doctor, or other)	49	40-64
Other (teacher or revenue official)	49	42-67
All motivators		
(No. of sterilized women)	(4,084)	(707-1,247)

ANM = auxiliary nurse-midwife; PHC = primary health center; TT = tetanus toxoid.

As shown in Table 8.7, only 10 percent of sterilized women from the four districts reported having been informed about other family planning methods by

the health workers. In tribal districts this percentage was even lower, at 3 percent (data not shown). At the time of sterilization, almost all women were given a TT injection to minimize the risk of infection. About half of all sterilized women were sterilized at the PHC or at the weekly camps organized by the PHCS. An additional 45 percent were sterilized at government hospitals.

Interestingly, 41 percent of the sterilized women said they had been self-motivated to adopt the method, and only 29 percent had been motivated by a FHW. The role of nonhealth staff, such as schoolteachers, village revenue functionaries, and village heads, in motivating women to accept sterilization was substantial, accounting for 16 percent of all sterilization cases. The roles of health and nonhealth personnel varied according to the district.

Although proper follow-up is an essential component of the quality of service, overall only about one-half of the women reported a follow-up visit by the health worker. Admittedly, our sample includes some older women who must have been sterilized several years prior to the interview and therefore may have had problems of recall. Nevertheless, one of the major complaints we heard against the ANMs was that they were interested primarily in recruiting sterilization acceptors. According to many respondents, once a woman was sterilized, the ANM rarely visited her after the first checkup.

When we examined the incidence of follow-up care according to who had motivated the women to accept sterilization, it became evident that proportionately fewer women who had been either self- motivated or motivated by nonhealth staff received follow-up care than did women who had been motivated by health workers; the difference was statistically significant. During the in-depth interviews and in focus-group discussions with contraceptive users, it was suggested that health workers were denying follow-up services to women who had not been motivated by them. Many of our informants reported that although health workers worked hard to motivate their "cases" so as to meet their annual sterilization targets, other local functionaries-*talati* (revenue officials), school teachers, or *anganwadi* workers (women in charge of the centers under the Integrated Child Development Scheme)-who were not connected with the health sector were able to "snatch away the cases" and take credit for motivating them. The nonhealth functionaries, they asserted, were able to do so by promising the acceptors a higher incentive in cash or kind. The health workers then retaliated by refusing to provide follow-up services to those acceptors. Some of the health workers themselves con- firmed this during a group discussion. Women who had been denied follow-up services often

regretted having been lured by the promises of nonhealth staff, which were almost never fulfilled.

On the basis of acceptor records maintained by the FHWs for calendar years 1989 and 1990, we attempted in early 1991 to trace the acceptors of various methods in 22 villages of the districts of Bharuch and Panchmahals. Of the 259 sterilized women we contacted, almost all (254) confirmed that they had indeed been sterilized in the previous two years. As shown in Table 8.8, their average age at the time of sterilization was 26 years. They had an average of nearly four children at the time they were sterilized, ranging from 3.4 children in Bharuch to 3.9 children in Panchmahals.

Table 8.8: Profile of women sterilized during 1989-90: Bharuch and Panchmahals Districts, Gujarat (based on 1991 retrospective survey)

Characteristic	**Average, both districts**
Mean age at the time of sterilization (years)	26
Mean number of children	3.7
Percentage for whom sterilization was the only method of family planning used	92
Percentage offered a choice of other methods (excluding self-motivated)	12
Percentage motivated to accept sterilization by Self ANM Male health worker Teacher, revenue official, or other village functionary	41 34 9 16
(No of sterilized women)	(254)

ANM = auxiliary nurse-midwife

When asked whether they had used any other method of family-size limitation before accepting a permanent method, 92 percent of the women reported that sterilization was the first and only method they had used. Only 12 percent of the women (5 percent in Panchmahals and 20 percent in Bharuch) had been offered a

choice of other contraceptive methods. The literature on quality of care may emphasize choice as an important dimension of quality, but women in rural areas of India appear to enjoy little choice in real life. It appears that women may even reject choice on their own because sterilization, in one stroke, takes care of their contraceptive needs. In this survey, 41 percent of sterilized women also reportedly had been self- motivated. About the same proportion (43 percent) of women had been motivated by health workers (including male health workers, who also had to meet family planning targets), and the rest had been motivated by the other village functionaries.

At the sterilization camp or clinic, care provided to the women consists of a health checkup, a TT injection, and the operative procedure performed under general anesthesia. As shown in Table 8.9, however, about 59 percent of the women reported suffering pain or discomfort during the procedure. It is quite likely that in those cases the effect of anesthesia had worn off before the procedure was completed. Only about a quarter of the women reported having, been given snacks and coffee after the operation. The provision of this prescribed post-operative stimulant was reported to be much lower in Bharuch (15 percent) than in Panchmahals (41 percent). The reasons for such large differences between districts in the provision of snacks are unclear because the money for such services is earmarked on a uniform basis.

Table 8.9: Care received at the time of sterilization by women sterilized in 1989-90: Bharuch and Panchmahals Districts, Gujarat (based on 1991 retrospective survey)

Place of sterilization and care received	**Average, both districts (%)**
Place of sterilization	61
PHC camp	24
Government hospital	8
PHC	8
Private hospital	
Care received during sterilization	89
Health check up	100
TT injection	97
General anesthesia	59
Pain suffered during operation	28

Snacks after sterilization		
	While being taken to sterilization site	**After sterilization**
Accompanied by	62	57
ANM	12	14
Anganwadi worker	12	14
Teacher or other functionary	8	10
Male health worker	6	5
Dai		
Mode of transport	49	5
State vehicle	21	74
PHC vehicle	20	20
Private vehicle	10	1
Walking		

Note: Percentages may not add to 100 because of rounding

ANM = auxiliary nurse-midwife; PHC = primary health center; TT = tetanus toxoid.

Women who agree to accept sterilization are "highly prized" human beings until the time they are sterilized. The health workers accompany their cases to the place of sterilization; partly out of fear that they may lose them to other functionaries or that the women themselves may change their minds and decide not to undergo sterilization. By accompanying the women, the health workers are able to hold on to their cases. The functionaries who take their clients to the venue of sterilization also undertake the responsibility of bringing them back to their homes.

As shown in Table 8.9, nearly one-half of the women we surveyed reported that they had traveled in state transport buses to the venue of sterilization. In about one-fifth of the cases, a PHC vehicle was provided. After the sterilization, nearly three-fourths of the women were brought back in the PHC vehicle, and for one-fifth of the women a private vehicle was hired.

The PHC jeeps are used extensively to transport sterilized women to their homes, even if only one woman has to be transported over some distance. The transportation provided to women is one service that compensates for several shortcomings of the sterilization process, including the occasional highhanded behavior of the health functionaries. Women rarely report dissatisfaction with the quality of services provided to them. In fact, many express a sense of gratitude because, in spite of the unpaved road, a jeep is sent even at night to drop a sterilized woman right at her doorstep.

After the sterilization operation, 84 percent of the women we surveyed reported being visited by a health worker for a checkup (Table 8.10). The women who underwent a laparoscopy were generally visited at home for removal of the bandage. Tubectomy patients were apparently advised to consult the doctor postoperatively and were therefore instructed to visit the PHC. About a quarter of the sterilized women complained of heavy bleeding, backache, weakness, or other discomforts after the operation. Those women felt that their complaints were generally ignored or brushed aside by the health workers. On the other hand, health workers felt that clients' complaints were often vague and in most cases probably due to the poor health of the women, rather than to the surgery itself. Two-thirds of the sterilized women continued to experience discomfort up to the time of the survey. Responding to questions about their health status, they typically reported that their body had never regained full vitality after the operation. Nevertheless, 93 percent of the women did not regret having undergone sterilization and would even recommend it to others. A majority of those who regretted the sterilization had experienced the loss of a child since the procedure.

Table 8.10: Poststerilization follow-up care received by women and complications experienced: Bharuch and Panchmahals Districts, Gujarat, 1989-90 (based on 1991 retrospective survey)

Follow-up care and complications	**Average, both districts (%)**
Visited and checked up by health worker	84
Instructed to return for checkup	55
Place suggested for checkup (among those instructed to return)	84
PHC	7
ANM's residence	3
	6

Subcenter Other	
Experienced complications after sterilization	26
Type of complication (among those reporting complications) Weakness Backache Bleeding White discharge Other	22 11 8 5 55
Experienced continuing complications	68
Satisfied with sterilization	93

ANM = auxiliary nurse-midwife; PHC = primary health center

Users of Temporary Methods

For the users of temporary methods, our survey had an extensive set of questions to determine the quality of care received by them. However, of the 530 women listed as current acceptors of IUDs, condoms, and orals whom we interviewed in 1991, only 73 women (14 percent) reported that they were currently using a temporary method. An additional 39 women (7 percent) indicated that although they were not using a temporary method at the time of the survey, they had used it in the recent past. The pressure to meet method-specific targets prompts many health workers to include among the acceptors some individuals who are not eligible because of their marital or pregnancy status, to report the same person as having accepted two methods, or to list fictitious names of acceptors who cannot be traced. We found that many of the 86 percent of current nonusers who had been listed as current acceptors were fictitious or duplicated names or nontraceable or noneligible acceptors. We sought to ascertain the reasons for discontinuing use by questioning actual acceptors whom we could contact and learned that such factors as a current or recent pregnancy, desire for more children, and husband's opposition to contraceptive use were the main reasons (see Visaria, Visaria, and Jain 1994).

Among the listed acceptors of the various reversible methods, more than 50 percent were classified as condom acceptors; the figures for acceptance of this method corresponded closely with the mandated method-specific targets. However, actual users of this male method formed an insignificant proportion of the acceptors (12 couples, or 4.5 percent of the 265 acceptors of condoms). Clearly, health workers distribute large quantities of condoms (or distribute them on paper), and distribution is equated to use with some numerical adjustment. The data suggest an enormous waste of scarce resources.

About a third (180) of the 530 reported current acceptors of reversible methods were classified as IUD acceptors. However, at the time of the January 1991 survey only 52 women (29 percent) reported themselves as current users of IUDs and an additional 14 (8 percent) indicated that they had used an IUD in the recent past but discontinued its use after some time. The current users of IUDs accounted for more than 70 percent of the total of 73 current users of the three temporary methods of the program. Among the temporary methods offered by the Family Welfare Programme, the IUD appears to be much more acceptable than any other method. Oral pills have played an insignificant role in the program, possibly because a small target has been established for them.

Of the 66 confirmed ever-users of IUDs, 62 percent had the device inserted at a PHC or government hospital and about one-fourth went to a private clinic for the insertion (Table 8.11). Only about 15 percent were provided the device at their subcenter, probably because of the lack of adequate facilities at the subcenters. A "nurse" attached to the PHC or hospital provided the service in 86 percent of the cases. Only 12 percent of the IUD acceptors received any information about other methods of family planning. They accepted an IUD because they felt that other reversible methods might not be convenient, they did not know about the other methods, or their past experience with an IUD had been satisfactory and therefore they wanted to use it again.

Table 8.11: Quality of care provided to ever-users of IUDs, as reported by users: Bharuch and Panchmahals Districts, Gujarat, 1989-90 (based on 1991 retrospective survey)

Circumstance	Average, both districts (%)
Place where IUD was inserted	49
PHC	13

Government hospital Private clinic Subcenter	24 15
Person who inserted IUD "Nurse" Doctor	86 14
Acceptors informed about other methods	12
Reason(s) for preferring IUD Other methods not convenient Found it convenient in the past Did not know about other methods Other	55 21 14 10
Received a checkup before IUD insertion	49
Care taken by provider before insertion Washed hands Put on gloves Boiled instruments Don't know	41 41 4 14
Experienced pain during insertion	25
Among those who experienced pain Complained about pain to provider Was given painkillers	93 77
Received a follow-up visit at home	67
Did not regret the IUD insertion	98
(No. of ever-users of IUDs)	(66)

IUD = intrauterine device; PHC = primary health center

Nearly one-half of the IUD users reported receiving a checkup before the device was inserted. A little over 40 percent of the users indicated that the provider washed his or her hands and wore gloves before inserting the device. (It is possible that others may not have been very observant.) A quarter of the women

experienced pain during the insertion, and nearly all of these women complained to the provider. In three-quarters of such cases, some painkiller was dispensed. About two-thirds of the women reported a follow-up visit by a health worker at home. Very few women (2 percent) regretted having accepted the IUD.

Conclusion

The data presented above offer several important lessons for the Family Welfare Programme. When our studies were conducted in rural areas of Gujarat during 1989-91, the concept of reproductive health was not as well crystallized as it has become since the United Nations Conference on Population and Development, held in Cairo in 1994. As a signatory to the conference's Programme of Action, India needs to review its Family Welfare Programme in the context of the commitments made in Cairo to promote reproductive health among women. The concerns voiced by the health workers in Gujarat in 1989 are, in a sense, echoed in the Cairo document. If we are able to provide good health care to women before, during, and after childbirth, and to instill confidence in them that their children will receive good health care, the program's emphasis (misplaced, in my view) on attaining method-specific quantitative targets should not be necessary. The health workers understand this point very well. Their priorities are therefore quite different from those of their superiors.

The training that health workers receive in the provision of antenatal, natal, and postnatal care is an asset. With some reorientation and additional training, the ANMs can use their skills to offer reproductive health care to women with a modicum of additional resources, provided that their goals are correctly defined. This shift in emphasis would be beneficial to women and would boost the morale of the health care providers.

The analysis also brings home a point that has been reiterated many times in recent years: the Indian program has placed too much emphasis on method-specific contraceptive targets. From the perspective of health workers, this overemphasis has had an adverse effect on their performance and their reputation. They feel deeply hurt when they are rebuked in the presence of other workers for not having fulfilled some of their targets. They also believe that the other good work they are doing is undervalued. This narrow focus leads to a neglect of other health care services. The oft-repeated policy of integrating maternal and child health care with family planning has not been implemented because of the program managers' obsession with the fulfillment of numerical targets.

With respect to the question of the quality of care received by the Indian populace, and by rural women in particular, the narration of a recent experience in a remote district is instructive. During our focus-group discussion with village women, we learned that they seemed reasonably satisfied with the services they had received from the health workers. The ANMs we met in a meeting at a PHC also indicated their overall satisfaction with the supervisory, targets, and infrastructural facilities at their PHC or community health center (CHC). The discussion took place in the presence of the PHC medical officer. After the doctor left, however, the ANMs reported to us that the borewell in the neighboring CHC had been out of order for several weeks, and that without water it was impossible to maintain the expected levels of sanitation and hygiene at the CHC. The entire place exuded a foul odor, and it was an ordeal to have to work there. We therefore decided to visit the CHC. When we arrived and tried to talk to the doctor in charge, we found him uncommunicative. Instead of talking to us directly, he instructed his clerk to answer our questions. The clerk explained that the prescribed procedures for getting the borewell repaired were an obstacle to improving the conditions at the CHC. Sterilizations continued to be performed in the CHC on the appointed day of the week with a tanker of water commissioned from the neighborhood. But the limited water supply prevented the staff from maintaining hygienic conditions, and one of the two wards had to be shut down, with men and women placed together in one ward. In this situation, as in others at the sterilization camps, PHCs, and subcenters, the grassroots health workers expressed concern about the quality of services provided to their "cases," but they had virtually no control over the substandard conditions.

The poor in rural areas are so vulnerable that when they seek help or care, they are generally not knowledgeable about standards of care, or even the types of assistance they are entitled to receive, and are grateful for whatever services are rendered to them. It is the better-informed who must lead in enforcing the appropriate norms of behavior for the relatively privileged health care providers, many of whom seem to observe the Hippocratic oath more in breach than in practice. Perhaps, if the devolution of powers envisaged under the recently enacted Seventy-third and Seventy-fourth Constitutional Amendments becomes effective in India, and the panchayats begin to monitor and supervise the activities of doctors and other health functionaries, the bureaucratic malaise that currently characterizes the public-sector program might begin to be challenged and effectively addressed.

Acknowledgments

This chapter has benefited from comments on an earlier draft by participants in the Workshop on Quality of Care in the Indian Family Welfare Programme. I am especially grateful to Michael Koenig and Pravin Visaria for their comments and suggestions. Thanks are also due to the field investigators, especially Ila Mehta and Rita Dave, who helped me collect the data analyzed here; to Jignasu Yagnik for data management and processing; to Arti Dave for computational assistance; and to Sheela Devadas, V. A. Vasanthi, and Girija Balakrishnan for word processing. The responsibility for any errors of fact or interpretation rests with me alone.

Notes

1. The terms "auxiliary nurse-midwife" and "female health worker' are used interchangeably, although there is a minor difference between the two. The ANMs, who received their training earlier than the FHWs, underwent more intensive training and for a longer period than is now required for the FHWs. The ANMs surveyed for the current study often mentioned this distinction during their conversations with my colleagues and me, and we agree that the ANMs are generally better trained and qualified.

2. Of the 100 ANMs from two of the districts (four villages had two ANMs each), we were able to contact 88. Six of the 12 nonavailable ANMs were on maternity leave; the position of the ANM was vacant at the time of the survey in three villages; and the remaining three workers were reported to be on leave and could not be contacted. The survey of the health workers in the other two districts was conducted by another organization, the Operations Research Group, in Baroda, under a subcontract. We were provided data for 85 ANMs; the reasons for the nonavailability of 11 or more ANMs are not known.

3. More than two-thirds of the villages in the two tribal districts had subcenter buildings with living quarters for the ANMs. Various donors had provided the financial resources, and in most cases the village *panchayats* (councils) had donated the land.

4. The distribution of ORS packets to health workers is only a symbolic gesture, and their use has not been promoted with any seriousness.

Virtually none of the village women we interviewed indicated that they had obtained ORS packets from the health workers.

5. In another study in Gujarat, reported IUD insertions were found to reflect only a nominal fulfillment of the targets assigned to the health workers (Visaria, Visaria, and Jain 1994). The health workers themselves admitted this to be the case and indicated that they had simply to maintain their records "properly".

6. Apparently this is not always the case in some other states of India. Khan et al. (1994, p. 6) have reported that in Bihar only about 36 percent of the women surveyed reported having been visited by workers from their PHC or subcenter.

References

1. Bruce, Judith. 1990. "Fundamental elements of the quality of care: A simple framework," Studies in Family Planning 21(2): 61-91.

2. Ickis, John C. 1992. "Quality of family planning services in Latin America," in Managing Quality of Care in Population Programs, ed. Anrudh K. Jain. West Hartford: Kumarian Press, pp. 67-85.

3. Jain, Anrudh K., Judith Bruce, and Sushil Kumar. 1992. "Quality of services, programme efforts and fertility reduction," in Family Planning Programmes and Fertility, eds. James F. Phillips and John A. Ross. Oxford: Clarendon Press, pp. 202-221.

4. Khan, M.E., Rudranand Prasad,. Bella C. Patel, and Ram Bachan Ram. 1994. "Quality of care in Family Welfare Programme from users' perspective," paper presented at Seminar on Quality of Care Issues in Health and Family Welfare, Gujarat Institute of Development Research, Ahmedabad, 28- 29 April.

5. Mensch, Barbara. 1993. "Quality of care: A neglected dimension," in The Health of Women: A Global Perspective, eds. M. Koblinsky, I. Timyan, and I. Gay. Boulder, Colo.: Westview Press, pp. 235-253.

6. Miller, Robert A., Lewis Ndhlovu, Margaret M. Gachara, and Andrew Fisher. 1991. "The situation analysis study of the family planning program in Kenya," Studies in Family Planning 22(3): 131-143.

7. Simmons, Ruth and Christopher Elias. 1994. "The study of client-provider interactions: A review of methodological issues," Studies in Family Planning 25(l):1-17.

8. Simmons, Ruth, Laila Baqee, Michael A. Koenig, and James F. Phillips. 1988. "Beyond supply: The importance of female family planning workers in rural Bangladesh," Studies in Family Planning 19(l): 29-38.

9. Visaria, Leela and Pravin Visaria. 1992. "Quality of family planning services in Gujarat State, India: An exploratory analysis," in Managing Quality of Care in Population Programs, ed. Anrudh K. Jain. West Hartford: Kumarian Press, pp. 113-140.

10. Visaria, Leela, Pravin Visaria, and Anrudh Jain. 1994. "Estimates of contraceptive prevalence based on service statistics and surveys in Gujarat State, India," Studies in Family Planning 25(5): 293-303.