Quality in Primary Care 2010;18:345–52

International exchange

Experiences of women using reproductive health services in Egypt: one health system in two governorates

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ABSTRACT

Aim To examine and compare the viewpoints of women who have sought reproductive health care at units applying the health sector reform programme in two governorates, Menoufia and Alexandria, in Egypt.

Methods A two-stage cluster sampling method was used in which four health units were randomly selected from these two governorates. Cluster sampling was again used to select households from the village where each selected health unit was situated. Women who had used clinic services for reproductive health care during the three months preceding the study were interviewed at home.

Results Users came for treatment at the units mainly because of convenience and close proximity rather than for the quality of the services offered. Application of the system of booking appointments was found to be different in the two study governorates. Each governorate applied different systems for registering users with physicians. The freedom to choose the physician was missing from the programme. Many basic reproductive health questions were not asked and investigations not performed during the encounter with the physician.

Conclusions Although both governorates are supposed to be following the same health system with the same guidelines, findings have shown that the system varied in its application in many instances. The different rates of client turnout in the two governorates, together with complaints of long waiting times, difficulty in appointment booking, the lack of seating facilities in waiting areas, lack of choice of provider and/or forced registration with physicians according to lists assigned at district level, are all problems that should be further investigated if the needs of reproductive health service users are to be addressed. Physicians should accurately follow the examination guidelines set by the programme.

Keywords: Egypt, health sector reform programme, quality, reproductive health

How this fits in with quality in primary care

What do we know?
Reproductive and other health services are being improved in Egypt through the Health Sector Reform (HSR) programme which aims to achieve universal population coverage with a basic package of health services including reproductive and sexual health services.

What does this paper add?
This paper shows that there remain considerable variations in standards of care in reproductive health units in Egypt and that there is evidence of deficiencies in care.

Introduction

The government of Egypt, through its Health Sector Reform (HSR) programme, has set out, as a long-term goal, to achieve universal population coverage with a basic package of health services.[1] It aims to achieve greater equity of care and to improve health status and consumer satisfaction. The programme is delivered through the family doctor model. Egypt is currently piloting the programme in Menoufia, Alexandria and Souhag in addition to Qena and Suez. This pilot stage started in the late 1990s,[2] first in Menoufia and Alexandria, followed by the other governorates. Women's health services are part of the package of services provided by the programme. They include services related to family planning, antenatal, delivery, postnatal and post-termination care, genital tract infection, and breast and cervical cancer.

Although it is important to assess the quality of reproductive health services in the HSR programme as reported by users, few attempts have been made to do this. Previous assessments of service provision[3] have been conducted in Egypt but a greater need to assess the quality of reproductive health services within the health sector reform in Egypt has grown out of previous local work and research findings from the Silent Endurance Health Study in rural Egypt,[4] the Giza Morbidity Study[5,6] and the Giza Intervention Study.[7] Internationally, this need has been highlighted in the reproductive health literature in various studies from China,[8] Thailand[9] and Ghana.[10]

This study looks at and compares the quality, as reported by female users, of three aspects of reproductive health care at health units applying the HSR programme in two governorates in Egypt. The three aspects are family planning, antenatal care and gynaecological problems or complaints.

Methods

Geographical context

The programme has been implemented longest in Menoufia and Alexandria, compared with other governorates, and is more advanced there. Accordingly, the study covers Menoufia and Alexandria. Menoufia, a predominantly rural governorate, is situated in the heart of the Nile delta, and is divided into 11 densely populated administrative districts. Alexandria, the second largest urban governorate in Egypt, encompasses the port city of Alexandria, numerous adjacent industrial communities and urban and semi-urban slum areas which are now considered as extensions of the main port city. The two governorates share the same health administration system applied by the Ministry of Health and Population (MOHP).

Sample selection of women

This study used a two-stage cluster sampling method. In the first stage, four health units were randomly selected from the frame of accredited units providing the HSR basic benefit package in each of the two governorates. In the second stage, the area served by each selected health unit was divided into four geographical blocks and, starting from the centre, a cluster sample of 40 households was randomly selected in each block, making a total of 160 households in each location served by the health unit. Residence of at least one female in the reproductive age group (aged 15–49 years) in the household was used as the criterion for inclusion, irrespective of whether the family had registered for health insurance coverage or whether they had used the services of the health unit prior to the study.

Data collection instruments

The interviewer administered questionnaire was conducted with all ever-married women who were usual residents in the selected households and who had been users of the selected units during the three months preceding the survey. The questionnaire covered various topics such as users' reports of their own health, the last visit to the unit, out-of-pocket expenses, insurance costs and the referral system. A special module in the questionnaire was dedicated to users of family planning, antenatal care and gynaecological services.

Various professionals were involved in the development of the questionnaire – a gynaecologist, an obstetrician, an anthropologist, a sociologist, a demographer and a statistician. In addition, the framework for measuring responsiveness, as introduced by De Silva[11] and Valentine *et al*,[12] guided the development of the questionnaire. The concept of responsiveness has been defined to encompass the non-health enhancing, non-financial aspects of the health system.[11] The study sought information about dignity, autonomy, confidentiality, prompt attention, quality of basic amenities and choice of care provider.

Two pilots were conducted during the preparation of the questionnaire. Comments from the interviewers were reviewed during the process of finalising the questionnaires. The questionnaire was finalised after the second pilot and interviewers attended a training course on the finalised questionnaire. The course included lectures related to basic interview techniques, question by question training, role play, mock interviews and field practice. The home interviews were conducted during the summer of 2005, after permission

was gained from the Central Agency for Public Mobilization and Statistics, which is the governing body for any data collection activity in Egypt.

Although other tools such as exit interviews or direct observation could have been used, we relied on interviews because the main objective of this project was to report the viewpoints and the experiences of women users (as well as non-users) of the reproductive health programme. This study discusses only the reporting of the HSR users. Furthermore, exit interviews and observation were used within a different context of the project and their results have been discussed elsewhere.[13,14]

Statistical methods

The study used simple statistical methods to detect differences between the two governorates concerned including χ^2 and Fisher exact tests as well as the median tests. *P*-values are displayed in the tables presented. Relatively small sample sizes meant some differences did not achieve statistical significance.

Results

Study sample

There were 218 and 190 users who were classified as female users of reproductive health services of the HSR programme in Menoufia and Alexandria respectively. These groups of women represented 33.6% and 29.1%, respectively of all ever-married women in the sampled households, i.e. users and non-users. Reproductive health service users in both governorates were often repeat visitors: more than 90% had been to the unit at least three times during the two years preceding the study. Units were mainly chosen by service users because of their geographical proximity (about 50% in both locations). Fewer users reported attendance based on good services or courteous treatment (around 23% in both governorates). This pattern of reason for use of services was similar in both Menoufia and Alexandria. Almost half of reproductive health service users came for family planning services in both governorates. In Menoufia, less than one in every ten users came for gynaecological reasons compared to almost two in ten users in Alexandria. Just over 40% of service users in Menoufia came for antenatal care while in Alexandria a smaller proportion (34.7%) came for the same reason.

Menoufia users were better educated. In Menoufia, 17.4% were illiterate compared to 37.9% in Alexandria. Almost 50% had reached at least preparatory education in Menoufia compared with 21.6% in Alexandria. Female participation in economic activity was relatively low; 11% of the females in Menoufia were working compared with 7.4% in Alexandria. The median ages of service users in both governorates were close (28 years in Menoufia and 27 years in Alexandria). Median age at marriage was 19 years in both areas and almost all women (99%) were married at the time.

Reports of reproductive health service users

In Menoufia, few service users reserved appointments before seeing the HSR physician. In contrast, about half of the users (46.3%) in Alexandria did so. Despite this, users in Alexandria waited on average more than an hour before seeing the doctor compared to less than 30 minutes among users in Menoufia. More than two-thirds of the users in Menoufia waited less than 30 minutes, compared to almost one-fifth in Alexandria, as shown in Table 1. As a result, almost two-thirds (66%) of the users in Alexandria perceived the waiting time as long, while less than a quarter of the users in Menoufia reported that waiting time was long. Findings showed that almost a third of the users in Alexandria reported that there were not enough chairs at the waiting area compared with approximately 13% in Menoufia.

Almost 95% of service users in Menoufia checked in with any available physician at the HSR unit, compared to only one in every five users in Alexandria. In both governorates, around three-quarters of users were not able to choose their own physician. Findings have shown that the absence of this choice bothered more than one-third of users in both governorates.

Before examining the encounter between the physician and the reproductive health service user, 57 cases (26%) in Menoufia and one case (0.5%) in Alexandria reported that they were examined unsupervised by a nurse and not a physician. Accordingly, interaction with the physician was not assessed in these cases. Although users did not select their physician, almost all of them in both governorates reported that physicians treated them well. It is evident that there were more female doctors in Alexandria than in Menoufia: almost 72% of users in Alexandria reported that they were examined by a female doctor, compared to around 50% in Menoufia. Consultation times varied: in between 14% and 38% of encounters in Menoufia and between 11% and 30% in Alexandria, the examining physician did not ask general health questions, give users a chance to talk, examine them or explain the diagnosis, as indicated in Table 2. Findings showed that almost 50% of users spent less than 15 minutes on average with the physician in both locations. Accordingly, more than one in every ten users expressed dissatisfaction with the allotted time.

Table 1 Users' reporting of appointment, waiting time, area and working schedule

	Menoufia %	Alexandria %
Reserve appointment		
No	94.0	53.7*
Waiting time		*
Less than 30 minutes	68.0	20.5
30 minutes	20.1	13.1
One hour or more	11.9	66.3
Median waiting time (minutes)	15–29	>60*
Opinion about time		
Long	22.9	66.3*
Waiting areas have enough chairs		
No	13.4	33.3*
Registered with a specific physician		
No	95.4	20.5*
Days for examination		
Specific days	12.8	53.7*
Working hours		
Morning	37.6	32.1
Working hours are suitable		
No	7.8	20.0*
Selection of physician		
No, cannot choose physician	81.2	69.5*
Number of female users	218	190

* P-value <0.01 and **0.01 $\leq P$-value <0.05 (P-values for χ^2 test and Median test as needed)

Table 2 Physician–user encounter

	Menoufia %	Alexandria %
Behaviour of physician with user		
Bad	1.2	2.1
Sex of physician		
Male	46.6	28.0*
Physician asked general health questions		
No	21.1	19.6
Physician gave chance to talk		
No	16.8	12.8
Physician examined user		
No	37.9	30.2
Physician explained diagnosis		
No	24.8	29.1
Time with physician was enough		
No	13.7	11.2
Median time with physician (minutes)	15	15
Number of female users	161	189

* P-value <0.01 and **0.01 $\leq P$-value <0.05 (P-values for χ^2 test and Median test as needed)

In most cases, service users reported that they were alone with the physician and the door was closed. However, a few service users reported that they were not alone during the examination and that the door was kept open. Regarding preparedness, there were some deficiencies. Almost one in every five service users reported that there was no designated place to change clothing. In addition, around one-third of users in both locations did not have a specific place to put their clothes during the examination. Almost four in every ten users reported that there was no step to assist them to climb onto the bed for examination. Almost all were covered by sheets during examination.

Client–provider encounters of specific reproductive health groups

Each group of women coming for a specific reproductive health problem was followed up. They reported on the services and inquiries that the physician did or did not perform during the visit. Before looking at the results, it should be noted that the majority of female users who were examined by a nurse came specifically for family planning (73.7%) and antenatal care (26.3%). Those who attended for family planning and consulted a nurse went mainly for follow-up, such as obtaining more pills. However, very few service users reported that they went to change the method or had

problems with the method. Often a nurse, and not a doctor, communicated with them. These cases were not included here.

Among the users who came for family planning and were examined by a physician, the reasons for the visits were mainly regarding using a method for current non-users of methods (34.6%), changing the current method (12.7%), having problems with the current method (12.1%), or for follow-up (40.6%) for current users of methods.

Among those current non-users of methods who came to begin to use a method or those who came to change their current method, as shown in Table 3, a significant proportion of clients reported that they were not asked whether they had previously used any method (18.9% and 17.1% in Menoufia and Alexandria, respectively). A description of available methods was not given to many clients, especially in Alexandria (16.2% in Menoufia and 39.0% in Alexandria). The physician in many cases did not talk about the appropriate method, especially in Alexandria (24.3% in Menoufia and 43.9% in Alexandria). The physician often did not communicate the side effects of the suggested method (21.4% in Menoufia and 34.8% in Alexandria). Accordingly, many clients reported that they were still not satisfied with the method they had been using since the previous visit. Almost 12.5% and 25% in Menoufia and Alexandria respectively reported that they were not comfortable or satisfied with the method, as indicated in Table 3.

Table 3 Physician encounter with users who wanted to use or change the family planning method

	Menoufia %	Alexandria %
Users were not asked about previous method	18.9	17.1
Physicians did not talk about methods	16.2	39.0**
Physicians did not talk about appropriate method	24.3	43.9***
Physicians did not explain side effects	21.4	34.8
Users had not used method since the visit	13.5	2.4***
Users were not comfortable with the method used since the visit	12.5	25.0
Number of female users	37	41

* *P*-value <0.01, **0.01 ≤*P*-value <0.05 and ***0.05 ≤*P*-value <0.10 (*P*-values for Fisher Exact test)

Among those who came for method follow-up, often physicians did not ask the woman how she felt about the method or if she had had any problems with the method, more so in Menoufia – almost seven in ten users in Menoufia who came for a method follow-up were not asked about their opinion of the method. In Alexandria, the situation was better, but still 42.1% of those users were not asked how they felt about the method they were following.

Among those service users who attended for gynaecological problems, it was evident that many basic questions/investigations were not dealt with during the encounter with the physician. As shown in Table 4, almost one-fifth of users in Menoufia reported not being asked about the problem for which they were attending. In Alexandria, the situation was better, but still some users were not asked about the problem they were facing. Many routine inquiries for gynaecological problems were not conducted during the examination, e.g. about one-third of users were not asked whether they had vaginal discharge, more than half were not asked about pelvic pain, more than a third were not asked about periods and, surprisingly, in many cases the physicians did not perform either a gynaecological or breast examination when this was indicated. In many instances, physicians did not ask service users to come for follow-up (41.2% and 58.3% in Menoufia and Alexandria, respectively). Physicians often failed to explain the diagnosis or the prescribed medication to the user (23.5% in Menoufia and 13.9% in Alexandria).

Women attending for antenatal care services were asked to report on basic antenatal care questions, as indicated in Table 5. Findings indicated that in Menoufia one in every four women reported that they were not asked about their pregnancy compared with one in every five women in Alexandria. In almost half of the cases in Alexandria and almost two-thirds of the women in Menoufia, the heart rate of the foetus was not taken. In almost a quarter of the cases in Menoufia and a third in Alexandria, physicians did not advise pregnant women about appropriate diet/nutrition and physical exercise. One in every five women in Menoufia was not told when to come back for follow-up.

Table 4 Physician encounter with users who came for gynaecological problems

	Menoufia %	Alexandria %
Physicians did not ask about problem	17.6	2.8***
Physicians did not listen to problem	5.9	0.0
Physicians did not ask about vaginal discharge	35.3	30.6
Physicians did not ask about colour/odour/ quantity	9.1	16.0
Physicians did not ask about pelvic pain	52.9	58.3
Physicians did not ask about periods	41.2	36.1
Physicians did not perform a gynaecological examination	47.1	38.9
Physicians did not examine breasts	70.6	63.9
Physicians did not prescribe treatment	17.6	19.4
Physicians did not ask for further visit for follow up	41.2	58.3
Physicians did not explain diagnosis/ medication	23.5	13.9
Number of users coming for gynaecological problems	17	36

* P-value <0.01, ** 0.01 $\leq P$-value <0.05 and *** 0.05 $\leq P$-value <0.10 (P-values for Fisher Exact test)

Table 5 Physician encounter with users who came for antenatal care

	Menoufia %	Alexandria %
Physicians did not ask about pregnancy	26.0	18.2
Weight of user was not taken	1.4	3.0
Blood pressure was not taken	2.7	1.5
Blood and urine analyses were not taken	9.5	4.5
Pulse of foetus was not taken	63.0	48.5***
Physicians did not talk about nutrition/ exercise	27.4	37.9
Users did not take tetanus toxoid at unit	15.1	34.8*
Physicians did not say when to come again	15.1	4.5**
Number of users coming for antenatal care	73	66

* P-value <0.01, ** 0.01 $\leq P$-value <0.05 and *** 0.05 $\leq P$-value <0.10 (P-values for Fisher Exact test)

Discussion

The focus of this study was to report and compare the experiences of female reproductive health service users at selected health sector reform units in Menoufia and Alexandria.

It is evident that HSR units were well positioned in the villages since the majority of users chose a unit because of its close proximity. Geography was for most an important reason for choice of unit, whereas good service and courteous treatment were less often reported as the main reason for choosing a unit. Similar findings on location have come from units in Sudan.[a]

Although both governorates adopted the same health system and guidelines, findings have shown that the system of reserving appointments to see the physician varied. Moreover, service users in Alexandria waited twice as long as in those in Menoufia. At the same time, fieldwork interviewers observed that client turn-out in Alexandria was higher. This observation may explain the different systems of reserving appointments and longer waiting times in Alexandria. Two

[a] These findings were presented in a meeting organised by the Population Council in Sudan in 2006. The report of the findings is not yet available for citation

implications arise here: first, it is possible that more physicians are needed in Alexandria; second, further research is needed in Menoufia to study the factors behind the lower turnout, especially social factors that may deter women from seeking health care at these units.

Each governorate applied different systems of registering users with physicians. In Menoufia, users were not registered with a specific doctor while in Alexandria they were. This may be explained by workforce issues. Menoufia suffers from relatively higher turnover rates among physicians and there are fewer physicians per unit compared to Alexandria, where physicians are reportedly more experienced and highly trained. The ability to choose the individual providing care is of importance to health system users.[11] This choice was missing in the programme. It is worth investigating the influence, if any, of the absence of this choice on the lower turnout in Menoufia.

A significant number of service users were attended by a nurse and not a physician although other service users coming for the same purposes were examined by a physician. The reasons behind such a discrepancy in examination are worth exploring. This issue is expected to have significant implications for the programme and the integration and utilisation of reproductive health services within the package offered. Compared to previous studies,[13] the programme is definitely progressing in respect of privacy and in the preparedness of the examination room. However, a few service users still reported that they were not alone during the examination and that the door of the examination room was kept open. Regarding preparedness, there were some weaknesses. In some cases, there was neither a designated place for the woman to change her clothes, nor a specific place to put her clothes during examination. In some cases there was no step to assist the user to climb onto the bed for examination.

In many instances, physicians did not perform according to standard norms during the family planning check-ups, such as explaining available methods and side effects or asking about previously used methods. As a result it is possible that Egypt will not be able to increase contraceptive use as planned by the year 2017. This is reflected in more recent data which indicates that contraceptive use in Egypt is in a plateau phase.[15]

Among those service users who attended for gynaecological problems, many basic inquiries were not made during the consultation, such as asking about vaginal discharge, pelvic pain or periods. Similar deficiencies occurred in antenatal care such as history taking, foetal heart monitoring, advice about appropriate diet, nutrition and exercise or a follow-up visit. These results confirm earlier findings based on observations of the physician–client encounter.[13] It is possible then to expect that HSR will have a negative impact on utilisation of reproductive health services, similar to observations from China[8] and Thailand.[16]

Given the 15-minute consultation time, communication was poor in many cases. Although other studies suggest that nine to 14 minutes is the optimal time for exchange of relevant information and that further increases in consultation duration are usually associated with smaller improvements in the amount of information exchanged,[17] it is important to investigate how consultation time is actually spent.

There are several limitations of our findings. First, it is possible that some service users experienced recall bias. The study had to strike a balance between the data collection period and the expected sample of users: a three-month period was chosen to achieve an adequate sample size. Second, the social contexts of Alexandria and Menoufia are different. Alexandria is more urbanised and a coastal governorate while Menoufia, though it has better levels of education, is mostly rural, in an agricultural setting. Third, differences between the governorates do not reflect variation between units within the governorates.[13] Any future interventions or improvements need to consider this variation while aiming for better and more consistent services.

ACKNOWLEDGEMENTS

This research article is based on a project entitled *Reproductive Health Interventions in Egypt: an assessment study, Phase 2* implemented by the Egyptian Society for Population Studies and Reproductive Health in collaboration with the MOHP's Central Administration for Technical Support and Projects, and funded by the FORD Foundation (project No. 1035–1745–1). The authors wish to thank the team of researchers who contributed to this study.

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PEER REVIEW

Not commissioned; externally peer reviewed.

CONFLICTS OF INTEREST

None.

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Received 7 April 2009
Accepted 22 August 2010