

Are patients and healthcare providers satisfied with health sector reform implemented in family health centres?

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ABSTRACT

Background Patients' and healthcare providers' satisfactions are important outcomes for any healthcare programmes. In Egypt, the Health Sector Reform Program (HSRP) has been implemented since 1999 in primary healthcare (PHC) centres adopting the family health approach.

Objectives To assess the clients' satisfaction towards the overall health services provided by health centres affiliated to HSRP and to evaluate the satisfaction of healthcare providers, physicians, nurses and social workers.

Methodology Four reformed PHC units were compared with four non-reformed units in the Alexandria governorate regarding patients' and providers' satisfactions. Assessment of the satisfaction was done using survey questionnaire and focus group discussion. The provider survey questionnaire was carried out on all providers working in the selected units. Focus group discussion was done in one reformed health unit and another non-reformed unit.

Results The current study showed that providers in the reformed PHCs were more satisfied than providers in non-reformed PHCs regarding availability of equipments, job satisfaction and income satisfaction. No significant differences were noticed between both groups regarding social relations with either colleagues or directors. The patient satisfaction was higher in accredited family health units compared to non-accredited units in all aspects: cleanness, doctors and nurses, waiting area and waiting time. During the focus group discussion, patients in the accredited PHCs expressed their satisfaction regarding the cleanness, privacy, attitude of doctors and nurses as well the waiting area and waiting time.

Conclusion Implemented HSRP in PHC units has had positive implications regarding patients' and providers' satisfactions in most areas studied.

Patients' ratings of their healthcare experience have become increasingly important as indicators of the quality of care.¹ In addition, client or consumer expectation is considered to influence their satisfaction with the service provided.² Patients' views are being given more and more importance in policy-making. Understanding populations' perceptions of quality of care is critical to developing measures to increase the utilisation of primary health care (PHC) services.³ In a study about the perceived quality of PHC services in Burkina Faso, the authors concluded that improving drug availability and financial accessibility to health services were the two main priorities for health policy action.³

Meanwhile, in Estonia, the overall patients' satisfaction with family doctor reached 87% after implementation of the health sector reform.⁴ In general, patient satisfaction is associated with continuity especially for high clinical users.⁵

Healthcare providers' satisfaction is also an important element on how to improve the quality of service provided at PHC level. Satisfaction with work was found to vary with working hours, amount of paperwork, level of governmental interference and time spent in public or private practice.⁶ In addition, years of experience and job speciality are strongly correlated with job satisfaction.⁷

The Health Sector Reform Program (HSRP) in Egypt was started in the Alexandria province at Montaza district in 1999 by opening the first family health centre in the El-Seuef area. Thereafter, another four family health centres in the same district were opened. The concept of family medicine as an approach for improving the health services at the level of PHC care was introduced in the previous family health centres. This new approach required changes in the existing system at the time of its implementation to adapt the strategy of HSRP. Recently, an extra cost for service was planned from the Ministry of Health and Population (MOHP) for accredited and privileged centres as these centres provide excellent services and supply essential drugs. These changes may create some difficulties for both patients and healthcare providers, particularly at early stages of implementing the system. Accordingly, some clients complain of these extra costs, which in turn affect their utilisation of the services, that is, decrease outpatient clinic attending rate.

The HSRP conducted periodically routine evaluation of patient satisfaction on a small scale. Our study aims to support the HSRP activities and to provide some clues about the deepening understanding of patients' perception and satisfaction, together with the insight feelings of healthcare providers towards the work load and financial system.

METHODOLOGY

Research setting

The study included eight PHC units/centres; four reformed and four non-reformed.

The following reformed PHC units/centres were included in the study: Somoha, San Stefano, Derbala and El-Amrawy. The non-reformed PHC units/centres were Dana, El-Matar, Abo-Keer, and El-Montaza Curative Health Care Centre.

The reformed PHC units/centres were included in the pilot phase of HSRP (study units/centres).

The non-reformed PHC units/centres were selected to be similar in socioeconomic characteristics to the reformed PHC units/centres but not yet introduced in the implementation of HSRP (control units/centres).

The reformed health centres are characterised by the following:

1. Renovated building or totally new building.
2. All healthcare providers get a short-term training (3 months) in family medicine practice.
3. Better facilities for lab investigations.
4. Better supply of essential drugs.
5. Must be accredited from the Department of Health Care Quality of the MOHP.

Egypt started a pilot project in Alexandria for health sector reform. It is the first governorate in Egypt that started the implementation of health reform. Some family health centres are reformed but *not* accredited; therefore, these are not included in our study.

Duration and time

The duration of the study was 14 months from 16 April 2005 to 15 June 2006.

Research methodology

Sample size

Regarding patient satisfaction, the estimated sample size was 400 patients (200 in reformed units/centres and 200 in non-reformed units/centres). Sample size calculation was based on the following assumptions: overall satisfaction rate, 80–90%; α error, 0.005, β error 0.2. The actual sample size taken 380 patients.

Regarding the provider satisfaction, all healthcare providers in the selected units were enrolled in the study.

Tools of the research

1. Interview questionnaire for healthcare providers: the questionnaire included personal data, satisfaction related to work, social relations, income, etc. Satisfaction rating was done using the Likert scale. The Likert scale was composed of 5 points but was not validated.
2. Interview questionnaire for patients: the questionnaire included personal data, satisfaction regarding accessibility, waiting time, cleanness, cost of services, etc. Interviewers were a mix from one of the authors (AMAA) and two individuals from the family health department of Alex University (not from the MOHP). We did not ask the patients about their names for confidentiality and to allow them to mention their evaluations freely.
3. Focus group discussion: two focus group discussions were carried; one in a reformed unit (El-Amrawy unit) and another in a non-reformed unit (Sedie Bishr Health Office/Montaza curative centre). Three sessions were done in each unit; one for the patients, one for the physicians and one for nurses. Focus group was recorded and then analysed by listening to the recorder and gathering the information into categories.

Statistical analysis

Comparisons between reformed and non-reformed units/centres were done using the Student *t* test for continuous variables and Pearson's χ^2 test for categorical variables. Data entry and statistical analysis were done using SPSS V.11.0. Level of significance was set at a *p* value of ≤ 0.05 .

Table 1 The mean percentage of patients' satisfaction in reformed and non-reformed PHC units/centres towards waiting area

	Reformed (mean (SD))	Non- reformed (mean (SD))	Student <i>t</i> test	<i>p</i> Value
The place of waiting area	96.0 (10.5)	63.3 (25.5)	16.197	<0.0001
Comfortability of chairs	97.1 (6.6)	56.1 (26.8)	20.248	<0.0001
Sufficient number of chairs	96.7 (6.7)	46.1 (26.9)	24.951	<0.0001

PHC, primary health care.

RESULTS

Patients' satisfaction

We interviewed 380 patients of whom 60 were men and 320 were women. Sex distribution was nearly similar in both reformed and non-reformed units/centres (women 85.3% vs 83.2%) with no statistical significant difference.

The education status of patients attending the reformed and non-reformed units/centres varied from illiterate (15.8% vs 17.4%), primary to secondary (71% vs 80.5%) and university degree (13.2% vs 2.1%).

Tables 1–3 show that patients receiving the health service in the reformed PHC units/centres are more satisfied than patients receiving the health service in the non-reformed PHC units/centres regarding the waiting areas, healthcare providers, different aspects of healthcare provided, together with the skills of doctors and nurses, with statistically significant difference.

Most of outpatient attendees in reformed PHC units/centres (99.5%) reported that they would advise their relatives and friends to attend the PHC units/centres compared with the lower percentage of outpatient attendees in non-reformed PHC units/centres (81.6%), with statistically significant difference ($p < 0.001$).

Approximately two-thirds (60.3%) of outpatient attendees in reformed PHC units/centres thought that the health services were better this year than the previous year compared with one-third (31.6%) of outpatient attendees in non-reformed PHC units/centres, with statistically significant difference ($p < 0.001$).

Most of outpatient attendees in reformed PHC units/centres were satisfied with price of ticket (91.8%), price of drugs (91.1%) and price of laboratory analysis (91.0%).

Providers' satisfaction

The current study showed that healthcare providers in the reformed PHC units/centres were more satisfied than healthcare providers in non-reformed units/centres regarding equipments

Table 2 The mean percentage of patients' satisfaction in reformed and non-reformed PHC units/centres towards healthcare providers (physicians and nurses)

	Reformed (mean (SD))	Non- reformed (mean (SD))	Student <i>t</i> test	<i>p</i> Value
Towards physicians				
Consultation time	96.7 (7.2)	82.6 (29.1)	6.464	<0.0001
Proper hearing	97.6 (5.2)	84.6 (18.9)	9.060	<0.0001
Proper explanation of the treatment	97.9 (5.0)	85.9 (46.4)	3.515	<0.0001
Proper care	97.2 (6.0)	89.6 (13.6)	7.096	<0.0001
Privacy during consultation	97.7 (7.2)	80.5 (20.1)	11.122	<0.0001
Towards nurses				
Proper care	93.1 (10.0)	81.2 (15.9)	8.688	<0.0001
Proper communication	93.2 (10.7)	80.7 (15.2)	9.238	<0.0001

PHC, primary health care.

Table 3 The mean percentage of patients' satisfaction in reformed and non-reformed PHC units/centres towards different aspects of healthcare provided, together with the skills of doctors and nurses

	Reformed (mean (SD))	Non- reformed (mean (SD))	Student t test	p Value
Overall satisfaction for PHC	94.8 (8.7)	72.7 (13.4)	18.631	<0.0001
Family planning	97.5 (5.0)	82.2 (14.5)	9.964	<0.0001
Maternal health	97.3 (7.0)	86.5 (15.3)	6.505	<0.0001
Health education	97.4 (7.9)	80.5 (15.4)	9.162	<0.0001
Skill of doctors	97.8 (4.8)	85.6 (15.3)	10.558	<0.0001
Skill of nurses	93.4 (9.7)	82.7 (16.1)	7.846	<0.0001

PHC, Primary Health Care.

available, workload, job satisfaction and income satisfaction. Meanwhile, person-to-person and person-to-boss relations were not different between healthcare providers in the reformed and non-reformed PHC units/centres (table 4). In addition, healthcare providers in the reformed and non-reformed PHC units/centres reported facing problems in their work without any significant problems (table 5).

The most relevant finding of the focus group discussions revealed that relations between colleagues and with the directors were satisfactory in the reformed and non-reformed PHC units/centres.

DISCUSSION

The concept of patients' or customers' satisfaction received ultimate importance in recent years because of the emerging competitiveness among the healthcare services and the pressure from payers. Accordingly, it is prudent to measure patients' satisfaction when addressing evaluation of a new health system such as accreditation.⁸

The current study showed that patients' satisfaction was higher in reformed PHC units/centres compared to non-reformed PHC units/centres in all aspects: cleanliness, doctors and nurses, waiting area and waiting time. The overall satisfaction from the service rendered in the reformed PHC units/centres was significantly higher than that in the non-reformed PHC units/centres.

During the focus group discussion, patients in the reformed PHC units/centres expressed their satisfaction regarding the cleanliness, privacy, attitude of doctors and nurses as well the waiting area and waiting time. Patients in the non-reformed PHC units/centres expressed contradictory opinions regarding the above-mentioned items, which were clearly clarified during the interview with the patients.

The enquired domains of the patients' satisfaction survey are common domains for most published satisfaction surveys.⁹ Accreditation system of PHC care in Egypt addresses certain standards that may impact patients' satisfaction such as housekeeping standards, communication skills, training and environmental safety. This explains the connection between accreditation and the patients' satisfaction. However, this relation was not consistent in many researches. Heuer⁸ concluded no relation between accreditation score and patients' satisfaction. Salmon *et al*¹⁰ also noted no difference in effect of accreditation on patients' satisfaction between intervention and control groups. Difference between hospital system and PHC is quite evident in its complexity and diversity of services: inpatient, ambulatory, diagnostic and rehabilitative. This may explain the discrepancy between satisfaction results at hospital level and the current study.

The satisfaction shown in this study regarding the privacy in clinical examination represents drastic change compared to the lack of such standards in a previous study where 16–50% of patients complained that they could find themselves being examined in the presence of other patients.¹¹

The overall satisfaction was 95% in reformed PHC units/centres compared with 72% in the non-reformed PHC units/centres. This agrees with many studies that reported a satisfaction rate >90%.^{12–13} However, the low satisfaction in the non-reformed PHC units/centres may be due to deterioration in the services in the non-reformed PHC units/centres or different population and service characteristics in the different studies. The overall satisfaction was also confirmed by the high percentage of patients recommending to the PHC units/centres to their relatives. This percentage was significantly higher in the reformed than in non-reformed PHC units/centres. The patients' satisfaction regarding the prices of tickets, drugs and laboratory

Table 4 Comparison between healthcare providers in reformed PHC units/centres and non-reformed PHC units/centres regarding facility equipment, workload, person-to-person relation, person-to-boss relation, job satisfaction and income satisfaction

	Very satisfied	Satisfied	Neutral	Unsatisfied	Very unsatisfied	p Value
Facility equipment						
Reformed	14 (16.3%)	51 (59.3%)	12 (14%)	5 (5.8%)	4 (4.7%)	<0.001
Non-reformed	11 (13.1%)	26 (31%)	17 (20%)	15 (17.9%)	15 (17.9%)	
Work load						
Reformed	22 (25.6%)	43 (50%)	11 (12.8%)	6 (8.1%)	3 (3.5%)	<0.001
Non-reformed	23 (27.4%)	32 (38.1%)	10 (11.9%)	7 (9.5%)	11 (13.1%)	
Person-to-person relation						
Reformed	56 (64.4%)	25 (28.7%)	4 (4.6%)	2 (3.2%)	0 (0%)	0.12
Non-reformed	40 (48.2%)	33 (39.8%)	6 (7.2%)	1 (1.2%)	3 (3.6%)	
Person-to-boss relation						
Reformed	44 (50.6%)	32 (36.8%)	8 (9.2%)	3 (3.4%)	0 (0%)	0.20
Non-reformed	32 (40%)	30 (37.5%)	10 (12.5%)	4 (5%)	4 (5%)	
Job satisfaction						
Reformed	39 (45.9%)	39 (45.9%)	6 (7.1%)	0 (0%)	1 (1.2%)	<0.001
Non-reformed	17 (22.7%)	31 (41.3%)	19 (24%)	6 (8%)	3 (4%)	
Income satisfaction						
Reformed	18 (20.9%)	34 (39.5%)	26 (30.2%)	5 (5.8%)	3 (3.5%)	<0.001
Non-reformed	10 (12.8%)	12 (15.4%)	21 (26.9%)	11 (14.1%)	24 (30.8%)	

PHC, primary health care.

Table 5 Comparison between healthcare providers in reformed PHC units/centres and non-reformed PHC units/centres regarding facing problems during work

	Reformed		Non-reformed	
	n	%	n	%
No problems	17	19.8	15	18.1
Few problems	28	32.6	32	38.6
Seldom have problems	30	34.9	15	18.1
Many problems	7	8.1	12	14.5
So many problems	4	4.7	9	10.9
χ^2 test	8.580			
p Value	0.072			

PHC, primary health care.

tests was more than 90%. This alleviates fears regarding the policy of increasing in the ticket prices as well the drug prices implemented by the reformed PHC units/centres.

Measuring providers' satisfaction has emerged as an important tool for assessing quality of health services as without their "buy in" to what the health services offer; a smooth tract for a good outcome cannot be warranted.¹⁴ The dimensions for measuring providers' satisfaction usually enclose satisfaction regarding work load, equipments, relations with colleagues and directors, income and overall job satisfaction.¹⁵ These areas were the main domains for the present survey.

Before reaching conclusions based on the present results, it is necessary to remember that reformed PHC units/centres receive support from the HSRP in the form of equipments, and healthcare providers are motivated by some incentives upon receiving accreditation. This agrees with the findings of better satisfaction among providers in reformed PHC units/centres regarding availability of equipments and income. The same findings were noticed during the focus group discussion. In the accredited EI-Amrawy Family Medicine Centre, physicians and nurses expressed their satisfaction regarding the availability of equipment and the income compared to the great dissatisfaction expressed by healthcare providers regarding the same items in Montaza centre as an example of non-reformed PHC unit.

The dissatisfaction among providers in the non-reformed PHC units/centres regarding the income agrees with a former study carried in non-reformed PHC units/centres in Egypt where the income showed the least satisfaction scores.⁷ Similar pattern of dissatisfaction regarding the income was noticed among physicians in public health services and general practitioners in Western countries.^{16 17}

Although it is often heard that healthcare providers appraise relations with colleagues, it is noted in our study that social bonding was not considered to be a significant expectation. Accordingly, it is recommended that future efforts in this area would not have to be as heavily emphasised. Other items such as fair pay had some of the highest expectation scores, and for this, great dividends in the long run have to be paid to investigate these issues to improve satisfaction.¹⁸ These inferences agree with the findings of the current study. Focus group discussion also revealed that relations with colleagues and directors were satisfactory in the reformed and non-reformed PHC units/centres, a finding previously confirmed during the interview with the healthcare providers.

The overall job satisfaction was significantly higher in the reformed PHC units/centres, which may be related to better satisfaction from the income or available equipments or from applying the system or most probably from the combination of these factors.

Looking at our findings with their consistency and coherency strongly suggests the external validity of the study. Although these results pertain solely to the Alexandria governorate, the methodology can be applied in other Egyptian governorates or even in other countries. We think that our results could be generalised to other developing countries or even developed countries. A recent study in Spain has demonstrated that the creation of the clinical management units in PHC improves the indicators of satisfaction of the costumers related to the installation of the centre, organisation and services of the centre and the availability of the healthcare providers.¹⁹ Also and of no doubt, healthcare providers of developing and developed countries would be more satisfied if given better facilities, speciality-specific training and better supplies of drugs.

In conclusion, implemented health sector reform in the PHC units/centres has positive implications regarding patients' and healthcare providers' satisfaction in most areas studied. We recommend generalisation of our results to other Egyptian governorates and similar settings in the countries that are considered developing countries.

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Competing interests None.

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