

Clients' Satisfaction with Primary Health Care in Muscat

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Date of Submission: June 30, 2011

Date of Acceptance: April 3, 2012

How to cite this article: Albalushi RM, Sohrabi MR, Kolahi AA. Clients' satisfaction with primary health care in Muscat. Int J Prev Med 2012;3:713-7

ABSTRACT

Background: To measure clients' satisfaction with primary health care in the capital of Oman, Muscat, and also to identify the factors affecting their satisfaction.

Methods: Through a cross-sectional study in health centers, 400 participants during the period from November 2009 to February 2010 were interviewed about their satisfaction degree with the primary health care services and setting. Four urban primary health care clinics from Muscat were selected randomly. Six domains of satisfaction including accessibility to services, continuity of care, humaneness of staff, comprehensiveness of care, provision of health education, and effectiveness of services were calculated from selected variables. The mean score of each area were calculated and then divided by the number of items in each area. Finally satisfaction areas were ranked based on recent criteria.

Results: Mean age was 29.5 years ($SD = 9.37$) for male and 26.01 years ($SD = 7.12$) for female participants. All the areas were suitable and only continuity of care had negative score. The ranked areas of satisfaction were as humanness of staff, effectiveness of services, access to services, provision of health educational materials, comprehensiveness of care, continuity of care.

Conclusions: Primary health care were accepted as a suitable strategy for providing health care among clients of urban health centers of Muscat. It can be recommended to other countries to use this as a choice for health care provision.

Key words: Community Health Centers, CS-42 Questionnaire, Muscat, patient satisfaction, primary health care

INTRODUCTION

Sultanate of Oman, lies in the south-eastern corner of the Arabian Peninsula with the total area of approximately 309.5 thousands square kilometers, provides its health services through primary health care (PHC). It is administratively divided in 5 regions and 4 governorates with 61 Wilayats. Its total population was 2,340,815 of which 23.9% were nonOmani in 2008. In Omani health system there are three kinds of hospitals including: Regional Hospital, which provides secondary and tertiary cares,

Wilayat Hospital, which provides both primary and secondary health care, and Local Hospital, which is a small hospital that provides PHC services to inhabitants in nearby villages. There are also 167 health centers of which 74 are equipped with beds (a total of 167 beds), and 21 extended health centers in the Ministry of Health, which have specialized outpatient clinics in different specialties.^[1]

Satisfaction is defined as a psychological situation, which are upshots when the emotion surrounding disconfirmed expectations is combined with consumer's prior feelings about the consumption experience.^[2] Patient satisfaction with health care is important for consistent relationships with care providers, identifying source of dissatisfaction, improved compliance, continuity of care, and ultimately better health outcomes. Patient satisfaction with PHC services has been measured in many countries with a wide range of methods including a questionnaire that was based on five-point Likert scale.^[3] Patient satisfaction is an important indicator of quality of PHC and health care performance.^[4]

Omanis, in Eastern Mediterranean Region of World Health Organization (WHO), use PHC as the fundamental of their health care system. In Oman all health services are provided through PHC in both urban and rural areas. Muscat, the capital of Oman, with a population of almost one million people^[5] has been chosen for this survey. This study aimed to assess the degree of satisfaction among the people in Muscat with this health care providing system and also its success as a PHC system.

METHODS

Cross-sectional sectional study was conducted from November 2009 to February 2010 in the capital of Oman, Muscat. Clients of four urban health centers were involved in this study. As Muscat has become an industrial city, nowadays, the residences were moved to the suburbs of Muscat; the Ministry of Health of Oman suggested eight health centers in order to cover the population residing in the suburbs of Muscat city, for which four of the recommended health centers were chosen randomly. They cover all socio-economic status of the targeted population. The health centers and their specifications are listed in Table 1.

Arabic languages questionnaires were named Client Satisfaction Questionnaire (CS-42) and used in this descriptive survey as the data collecting tool. The pilot study was administered by the survey group in order to validate and eliminate the translation errors. Face validity were tested using some clients' opinion and a few items were revised based on their feedback. For reliability, Cronbach's alpha was estimated as 0.83. The questionnaire covers the standard domains used in North American and European surveys by other authors, including Ware,^[6] Margolis,^[7] and Donabedian.^[8] The questionnaire include 42 questions in six main areas including accessibility to service, continuity of care, humaneness of staff, comprehensiveness of care, provision of health education, and effectiveness of services. Scoring the questions was based on five-point Likert scale. Validity and reliability of Arabic version of the questionnaire were performed in previous studies.^[3,7]

Table 1: The selected health centers and their specifications in Muscat

Features and specifications	Health centers' name			
	Al-Gubora	Muscat	Watyah	Al-Nahda
Operating time (hours)	14*	14*	14*	14*
Medical staff (n)	42	42	35	32
Nonmedical staff (n)	6	6	12	8
Doctors (n)	11	11	11	10
Pharmacy	1	1	1	1
Radiology	1	1	1	1
Laboratory	1	1	1	1
Weekly education of users of health services (at least)	Once	Once	Once	Once
Other services	Nutrition counseling, Geriatrics clinic, Diabetic and HTN clinic, Smoking clinic, Dental services, Community health.			

* After 2.30 pm only for Emergency.

The study was conducted in the waiting room of the four selected health centers over a period of 120 days. Four hundred clients from public urban health centers of Muscat were selected through a convenient sampling. Sample size was calculated considering type 1 error of 5% and degree of satisfaction of 50%. During the period of 120 days, different days of the week were chosen randomly to prevent selection bias. They lived in under-coverage area of the selected health centers and asked their health services from them. They were interviewed after written informed consent was given." Only one researcher interviewed the subjects to prevent interviewer bias.

Finally, items of five-point Likert scale for areas of satisfaction were recoded as: completely agree: 2, agree: 1, no idea: 0, disagree: -1, and completely disagree: -2; then the mean of every area were divided by its number of items and then they were ordered based on this new criteria.

Data analysis was number of items done using SPSS Version 16.0 (SPSS Inc., Chicago, IL, USA). Chi-square and *t*-tests were used for data analysis. *P* value of less than 0.05 was considered as significant level.

The project received approval from the Ministry of Health (MOH) of Oman and the Department of Health Information and Statistics.

RESULTS

The mean age of 400 selected users of health services was 27.5 years ($SD = 8.3$), median for age was 26 years and the mode was 25 years. The minimum and maximum age of service users were 11 and 60 years, respectively. Table 2 shows that men were older than women ($P < 0.01$). It also shows that women have come to the health centers to receive related services more than men. Highly educated people account for 29% of health centers services users and the other 56% were educated till high school level. Two-thirds of people came to

Table 2: Gender and age distribution of the users of the health services in Muscat

Gender	Number (%)	Mean age (Std. Deviation)
Male	167 (42)	29.5 (9.37)
Female	233 (58)	26.01 (7.12)
Total	400 (100)	27.5 (8.3)

P value < 0.01

the health centers for managing diseases and the other one-third asked for preventive care services. The most common causes of attending the health centers were common cold (28.5%), maternal care (21.8%), and fever (9.5%).

Half of them had no need to be referred to the hospital or transfer of their medical records from the hospital to the health center. The distance from their home to clinic was suitable in 237 (59.3%) subjects. Nearly 80% of the subjects came by their private car. Seventy percent of subjects claimed that car parking was suitable and good. About 42% of participants were not satisfied by physical seclusion of the centers for men and women.

They were not satisfied by the educational videos in the health centers. Eighty-seven percent were described on medication consumption by pharmacists. The outcome of the existing visit for 303 (75.5%) subjects was prescription of medication, 41 (10.3%) was without medication, 22 (5.5%) referred to hospital, and 22 (5.5%) referred to specialists. Totally 81% of participants were satisfied by received services.

When items of Likert scale for areas of satisfaction recoded, the mean and standard deviation for Access to services was 3.13 ($SD = 3.73$), continuity of care was -1.26 ($SD = 4.49$), humanness of staff was 4.56 ($SD = 7.24$), comprehensiveness of care was 1.16 ($SD = 3.51$), provision of health educational materials was 1.57 ($SD = 4.13$), and for effectiveness of services was 4.08 ($SD = 9.20$) [Table 3].

After dividing these scores by the number of items in each area, the ranked areas of satisfaction were as humanness of staff, effectiveness of services, access to services, provision of health educational materials, comprehensiveness of care, and continuity of care.

DISCUSSION

The purpose of this study was to assess the satisfaction degree of Omanis with the PHC system. The results showed that overall satisfaction, access to services, humanness of staff, provision of health educational materials, effectiveness of services, and comprehensiveness of care had acceptable situation. In contrast, continuity of care needs to be paid more attention.

High score of overall satisfaction with PHC services is a good point and can be considered as

Table 3: Means for domains of satisfaction in the selected Health Centers in Muscat

Domain	No. of items	Mean (SD)			Mean (Total)/Number
		Male	Female	Total	
Access to services	8	3.28 (3.91)	3.03 (3.61)	3.13 (3.73)	0.39
Continuity of care	6	-1.29 (4.50)	-1.24 (4.50)	-1.26 (4.49)	-0.21
Humanness of staff	8	4.21 (7.24)	4.80 (7.25)	4.56 (7.24)	0.57
Comprehensiveness of care	5	1.22 (4.46)	1.12 (3.56)	1.16 (3.51)	0.23
Provision of health educational materials	5	1.37 (4.07)	1.71 (4.17)	1.57 (4.13)	0.31
Effectiveness of services	10	3.95 (8.97)	4.18 (9.39)	4.08 (9.20)	0.41

P > 0.05 for all

an important index of the quality of health services to predict both capacity^[9] and consumption^[10] that is associated with the steadiness of care,^[11,12] the medical doctors' communication skills,^[13,14] and confidence in the health system.^[15] Other studies focused on satisfaction with primary care services and support overall satisfaction results of this study, which was 81%.^[16-19] Al Emadi^[3] used the same questionnaire and found the overall satisfaction of 75%, which is good but less than our findings. Emadi's highest score of satisfaction for the areas of services was for access to the health services and the lowest score was for comprehensiveness of care. Margolis's^[7] reported that continuity of health care and health education scores as the least scores and effectiveness of services and humanness of staffs as the highest scores, which is same as our findings; although its overall satisfaction is lower than our findings.

Management of the inpatients and outpatients is covered by the Omani health centers, this is not seen in the other country in the region, Iran, that uses PHC as the core of service provision.^[20] The outcome of services in Omanis was mainly for administration of drugs; this is vice versa of Iranian study that showed most people use preventive services of health centers.^[21]

Continuity of care in Muscat was below the median score of satisfaction. The most relevant explanation for this could be the absence of the family doctors.

In accessibility to service's criteria, separation of male and female in Muscat was significantly dissatisfactory. Hansen *et al.* reported that female patients who were visited by a female provider perceived higher quality.^[22] Humanness of staff, access to services, effectiveness of services, provision of health educational materials, and

comprehensiveness of care were over the middle range of satisfaction. As the result shows, five out of six areas of satisfaction have a suitable situation in Muscat. Only continuity of care needs more attention as discussed above.

Lesser cooperation of illiterates was one of the limitations of this study. We used the interview method for filling questionnaires as the method of data gathering to overcome this; but most of them did not agree to be a participant, hence the results for them should be used with caution. In contrast, the capital city may not represent all the other cities, but different socioeconomics have been considered in this study. This study did not pay attention to people who never used the public PHC services; other studies need to assess these issues.

PHC has been introduced by WHO as the best strategy for attaining the goal "health for all, 2000" and again has been bolded in 2008 annual WHO report.^[23] As the result of this study shows the users of health services' opinion on the quality of health care services and settings, Ministry of Health can use the results for evidenced-based policy making and quality improvement. Other studies such as community based participatory researches which involve the clients in all level of research^[24] and also satisfaction from the view point of health care providers should be considered in future.^[25]

CONCLUSION

PHC in Muscat has a suitable situation and can be recommended as an acceptable system for public health care provision for both inpatient and outpatient management. This study suggests that Client Satisfaction Questionnaire (CS-42) is an effective quality assurance tool and could be used by health administrators in quality assurance programs.

ACKNOWLEDGMENT

We would like to thank the Ministry of Health and the Department of Health Information and Statistics of Sultanate of Oman for their kind cooperation. We also thank the people who participated in this research with honest responses. This project has been done as a GP thesis in Shahid Beheshti University of Medical Sciences, we would like to thanks authorities of this University too.

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Source of Support: Nil **Conflict of Interest:** None declared.