

GENDER DIFFERENCES IN SATISFACTION WITH THE SERVICES PROVIDED IN PRIMARY HEALTH CARE CENTERS (PHCC): A COMPARATIVE STUDY

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ABSTRACT

Background: Gender differences may exist in the utilization of health care services. Such gender-based disparities could influence patient satisfaction. **Aim of the study:** To compare the satisfaction with PHC services between men and women in Mansoura City, Dakahlia governorate, Egypt. **Subjects and methods:** The study was conducted in three randomly selected PHC centers in Mansoura city, Dakahlia governorate, Egypt using a comparative cross-sectional analytic design on 120 men and 120 women attending the study settings. A self-administered questionnaire was used to collect data on satisfaction with the structure, process, and outcome aspects of service. The tool was rigorously revised by experts in Community Health Nursing, and it had good reliability. **Results:** The male and female participants in the study groups had generally similar socio-demographic characteristics, with higher prevalence of chronic diseases ($p=0.001$) and previous surgery ($p<0.001$) among women. Maximum women were satisfied with the space of the examination rooms ($p=0.01$), while satisfaction with comfort of the waiting area ($p=0.01$), behavior of technicians ($p=0.006$), cooperation of the healthcare team ($p=0.02$) and the problems being solved by the administration ($p=0.02$) was higher among men. In multivariate analysis, female gender was a negative predictor of the scores of the outcome aspect and total satisfaction. **Conclusion and Recommendations:** The study indicates low satisfaction with PHC services regardless gender, but women are less satisfied with outcomes and total satisfaction. Further qualitative research is proposed to explore the factors underlying gender differences in satisfaction with PHC services.

Keywords: *Gender, Patient satisfaction, Primary Health Care*

INTRODUCTION

Primary Health Care (PHC) is the backbone of health services in any country due to its efficiency in cost containment (Kringos *et al.*, 2013). One of the universally acknowledged key indicators of quality health care is the satisfaction of patients with PHC services (Raghunath Vijayalakshmi & Sathagurunath, 2013). Patient satisfaction measurement should cover all aspects of service, including structure, process, and outcome components. The assessment of patient satisfaction can help health administrators and stakeholders in pinpointing the unmet needs of the clients, so that the service becomes truly patient-

centered (Park, 2005). Moreover, patient satisfaction can serve in forecasting the utilization of health services and related compliance, and consequently in the reform of these services as well as of the health care system (Ilias, Shah & Ansari, 2006).

Gender differences do exist in the utilization of health services. These could be attributed to differences in the health needs related to different biology, in addition to the social aspects, as well as the differential access due to unequal opportunities (Song & Bian, 2014). For instance, In Egypt, as in many other developing countries, the access to health services is influenced by gender (Ali *et al.*, 2011), with more dominance of men

due to their head of household role (Fatimi & Avan, 2002) and access inequality (Hamid *et al.*, 2015). Many reasons underlie for such health illiteracy (Rizvi & Nishtar, 2008) including unsuitable working hours (Majrooh *et al.*, 2013), lack of female providers (Ansari *et al.*, 2015) and the need for permission from husband or mother-in-law (Qureshi *et al.*, 2016). Such gender-based disparities in access to health services need to be addressed. Hence, early in the new millennium, the WHO declared its gender policy (World Health Organization, 2002), which was followed by setting regulations and developing programs for promoting streamlining of gender in the provision of health services (World Health Organization, 2011).

Gender differences in access and utilization of PHC services might influence the satisfaction of the consumers of these services. However, previous literature indicates that the issue is still debatable. Thus, according to Laschinger *et al.*, (2005) women are often less satisfied compared to men, while Raghunath *et al.*, (2013) had the reverse opinion. Meanwhile, a meta-analysis came to the conclusion that there is no significant gender difference in patient satisfaction with health care services (Song & Bian, 2014).

Significance of the study

Like many developing countries, Egypt faces difficulties with health care services. Appropriate PHC is essential to develop an efficient and equitable national health care system. Patient satisfaction is a key indicator for quality care. The area of gender differences in client satisfaction with PHC services is still debatable and needs more research. This is of particular importance in the Egyptian setting where no comparative studies of patient satisfaction by gender have been carried out in PHC settings.

Aim of the study

This study aim was to compare the satisfaction of patients with PHC services between men and women in Mansoura City, Dakahlia governorate, Egypt. The research hypothesis was that there are gender differences in clients' satisfaction with PHC services.

RESEARCH METHODOLOGY

Research design and setting:

The study was conducted in three randomly selected PHC centers in Mansoura city, Dakahlia

governorate, Egypt using a comparative cross-sectional analytic design.

Population and sample

All women and men attending the selected centers in the specified days of data collection were invited to participate. The only inclusion criteria was being adult (18+ years) and able to communicate. The sample size was calculated to demonstrate any difference of 20% or more in the percentages of satisfied men and women at 95% level of confidence and 80% study power. Using the Open Epi software package and after adjusting for a non-response rate of approximately 15%, the required sample size for each of the men and women groups turned to be 120. The samples were recruited using a convenience sampling technique and according to the eligibility criteria.

Data collection tool

A self-administered questionnaire form was used in the collection of the required data. It included a section for respondent's socio-demographic data such as age, education, marital status, job, residence, income and crowding index and another section for history of chronic diseases, intake of medications, previous hospitalization and/or surgery, as well as the utilization of health care services and the settings used. The following section was for soliciting respondent's satisfaction with the structural aspects concerning cleanliness, space and comfort, the aspects of process concerning availability, punctuality, behavior and efficiency and the outcome aspects as treatment success and lack of errors. Each item was to be checked on a 5-point Likert scale from "strongly agree" to "strongly disagree." These were scored from five to one respectively. The scores for each aspect and its components and for the total satisfaction scale were summed-up and means, standard deviations and medians were calculated for quantitative presentation. For the categorical presentation of individual items, the "strongly agree" and "agree" responses were joined into one category.

The data collection form was rigorously revised by a panel of experts from the Community Health Nursing. They assessed the tool relevance, comprehensiveness, logic sequence and applicability of the tool for face and content validation. The reliability was examined by assessing its internal consistency. The analysis showed a

high level of reliability with Cronbach's alpha coefficient 0.88.

Fieldwork

Upon fulfilling official steps, the researcher visited the selected PHC centers, and met with the directors to explain the aim of the study and the procedures of data collection to get their permission and cooperation. Then, the researcher met with the eligible clients, explained to them the study goal, informed them about their rights, and invited them to participate. Those who provided their verbal consent to participate were given the data collection form and instructed to fill the form. This took 20-30 minutes from each respondent. The researcher was present all the time to clarify any ambiguities. The filled form was then collected and revised for completing the entire procedure.

Ethical considerations

The researchers carried out the study according to the Declaration of Helsinki (DoH). The study protocol was approved by the research and ethics committee. Each participant provided a verbal informed consent after obtaining clear information about the aim of the study and its benefits, as well as the right to refuse or withdraw at any time without giving any reasons. The researchers ensured anonymity by assigning each participant a code number for the purpose of analysis only. No incentives or rewards were offered to participants.

Statistical analysis

Data entry and statistical analysis were done using SPSS 20.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations and medians for quantitative variables. Cronbach alpha coefficient was calculated to assess the reliability of the satisfaction scale through its internal consistency. Quantitative continuous data were compared using the non-parametric Mann-Whitney test. Qualitative categorical variables were compared using chi-square test. Spearman rank correlation was used for the assessment of the inter-relationships among quantitative variables and ranked ones. In order to identify the independent predictors of the satisfaction score, multiple linear regression analysis was used and analysis of variance for the full regression models was done. Statistical significance was

considered at p -value <0.05 .

RESULTS

The male and female participants in the study groups had generally similar socio-demographic characteristics as presented in Table 1. The only exceptions were in their age ($p=0.008$), marital status ($p=0.001$) and job ($p<0.001$). It can be noticed that women were younger in age, with higher percentages of being married and unemployed. Slightly less than half of the two groups were found having no formal education.

Table 1: Socio-demographic characteristics of male and female participants

	Gender				X ² test	p-value
	Male (n=120)		Female (n=120)			
	No.	%	No.	%		
Age:						
<30	19	15.8	31	25.8	4.92	0.09
30-40+	76	63.3	73	60.8		
	25	20.8	16	13.3		
Range	20-62		18-58		U=7.11	0.008*
Mean±SD	39.3±8.7		35.8±8.6			
Median	40.0		36.5			
Education:					0.43	0.81
None	57	47.5	53	44.2		
Basic/intermediate	56	46.7	58	48.3		
University	7	5.8	9	7.5		
Marital status:					12.00	0.001*
Unmarried (single/divorced/widow)	30	25.0	10	8.3		
Married	90	75.0	110	91.7		
Job:					156.22	<0.001*
Employee	17	14.2	6	5.0		
Worker	101	84.2	17	14.2		
Unemployed	2	1.7	97	80.8		
Residence:					0.28	0.59
Rural	77	64.2	73	60.8		
Urban	43	35.8	47	39.2		
Income:					0.09	0.77
Insufficient	31	25.8	33	27.5		
Sufficient	89	74.2	87	72.5		
Crowding index:					0.60	0.44
<2	63	52.5	57	47.5		
2+	57	47.5	63	52.5		

(*) Statistically significant at $p<0.05$ (U) Mann Whitney

Table 2 illustrates significantly higher prevalence rate of chronic diseases ($p=0.001$) and history of previous surgery ($p<0.001$) among women, with more of them having a health insurance plan ($p=0.01$). Slightly more than a half of both samples visited the Primary Health Care Centre (PHCC) at least once during the last year. The median number of visits was

4.0 in both male and female patients. The table also illustrates more utilization of private settings in all types of health services in both groups. Meanwhile, significantly more women were utilizing private settings for treatment of chronic diseases ($p=0.01$).

Table 2: Health history and service utilization among male and female participants

	Gender				X ² test	p-value
	Male (n=120)		Female (n=120)			
	No.	%	No.	%		
Have chronic disease	49	40.8	74	61.7	10.42	0.001*
On regular medication	48	40.0	58	48.3	1.69	0.19
Visited PHC center last year	73	60.8	69	57.5	0.28	0.60
No. of visits:						
Range	1-30		1-20			
Mean±SD	4.4±3.4		4.3±3.2		U=0.49	0.48
Median	4.0		4.0			
Was hospitalized during last year	80	66.7	83	69.2	0.17	0.68
Had previous surgery	74	61.7	99	82.5	12.94	<0.001*
Have health insurance plan	19	15.8	35	29.2	6.12	0.01*
Settings used in case of:						
Acute illness:						
Public	34	28.3	33	27.5		
Private	86	71.7	87	72.5	0.02	0.89
Chronic illness:						
Public	32	26.7	16	13.3		
Private	88	73.3	104	86.7	6.67	0.01*
Investigations:						
Public	30	25.0	27	22.5		
Private	90	75.0	93	77.5	0.21	0.65
Surgery:						
Public	29	24.2	23	19.2		
Private	91	75.8	97	80.8	0.88	0.35
Rehabilitation:						
Public	32	26.7	21	17.5		
Private	88	73.3	99	82.5	2.93	0.09

(*) Statistically significant at $p<0.05(U)$ Mann Whitney

As shown in Table 3, the satisfaction with the structural aspects of PHCC services was found to be generally higher among male participants. However, the differences reached statistical significance only for the comfort of the waiting area ($p=0.01$). Conversely, significantly more women were satisfied with the space of the examination rooms ($p=0.01$).

Table 3: Satisfaction with the structural aspects of service among male and female participants

Satisfied/ strongly satisfied with:	Gender				X ² test	p-value
	Male (n=120)		Female (n=120)			
	No.	%	No.	%		
Waiting areas:						
Cleanliness	61	50.8	53	44.2	1.07	0.30
Space	68	56.7	65	54.2	0.15	0.70
Comfort	44	36.7	26	21.7	6.53	0.01*
Examination rooms:						
Cleanliness	52	43.3	48	40.0	0.27	0.60

Space	71	59.2	89	74.2	6.08	0.01*
Comfort	50	41.7	37	30.8	3.05	0.08
Lab/X-ray:						
Cleanliness	56	46.7	53	44.2	0.15	0.70
Space	73	60.8	81	67.5	1.16	0.28
Comfort	48	40.0	44	36.7	0.28	0.60
Toilets:						
Cleanliness	52	43.3	54	45.0	0.07	0.79
Space	68	56.7	60	50.0	1.07	0.30
Comfort	37	30.8	35	29.2	0.08	0.78

(*) Statistically significant at $p<0.05$

Regarding the satisfaction with the process aspects of PHCC services, there were some variations in participants' satisfaction by gender (Table 4). The highest satisfaction in both groups was with the availability of numbers of physicians, nurses and technicians. On the other hand, the lowest satisfaction among males was with the pharmacy waiting time, while among females it was with the behavior of the workers and administration. The only statistically significant difference revealed was that satisfaction with the behavior of technicians, which was higher among male participants ($p=0.006$).

Table 4: Satisfaction with the process aspects of service among male and female participants

Satisfied/ strongly satisfied with:	Gender				X ² test	p-value
	Male (n=120)		Female (n=120)			
	No.	%	No.	%		
Physicians:						
Availability	87	72.5	96	80.0	1.86	0.17
Punctuality	79	65.8	69	57.5	1.76	0.18
Behavior	72	60.0	57	47.5	3.77	0.052
Efficiency	69	57.5	60	50.0	1.36	0.24
Nurses:						
Availability	90	75.0	100	83.3	2.53	0.11
Punctuality	80	66.7	81	67.5	0.02	0.89
Behavior	76	63.3	65	54.2	2.08	0.15
Efficiency	73	60.8	64	53.3	1.38	0.24
Technicians:						
Availability	89	74.2	89	74.2	0.00	1.00
Punctuality	76	63.3	65	54.2	2.08	0.15
Behavior	65	54.2	44	36.7	7.41	0.006*
Efficiency	61	50.8	49	40.8	2.42	0.12
Workers:						
Availability	76	63.3	76	63.3	0.00	1.00
Punctuality	64	53.3	62	51.7	0.07	0.80
Behavior	50	41.7	40	33.3	1.78	0.18
Efficiency	49	40.8	40	44.9	1.45	0.23
Administration:						
Availability	85	70.8	83	69.2	0.08	0.78
Punctuality	67	55.8	57	47.5	1.67	0.20
Behavior	52	43.3	41	34.2	2.12	0.14
Efficiency	58	48.3	44	36.7	3.34	0.07
Examination/investigations:						
Schedule	90	75.0	88	73.3	0.09	0.77
Waiting time	47	39.2	49	40.8	0.07	0.79
Pharmacy:						
Schedule	82	68.3	86	71.7	0.32	0.57
Waiting time	48	40.0	48	40.0	0.00	1.00

(*) Statistically significant at $p<0.05$

Table 5 demonstrates a trend of higher satisfaction with the outcome aspects of PHCC services among male participants. The differences were of statistical significance regarding the cooperation of the healthcare team to serve patients ($p=0.02$), and the problems being solved by the administration ($p=0.02$).

Table 5: Satisfaction with the outcome aspects of service among male and female participants

Satisfied/ strongly satisfied with:	Gender				X ² test	p-value
	Male (n=120)		Female (n=120)			
	No.	%	No.	%		
Treatment success:						
Team cooperation to serve patients	66	55.0	48	40.0	5.41	0.02*
Problems solved by administration	53	44.2	36	30.0	5.16	0.02*
Medications	39	32.5	34	28.3	0.49	0.48
Referral	39	32.5	39	32.5	0.00	1.00
Lack of errors in:						
Diagnosis	43	35.8	46	38.3	0.16	0.69
Investigations	43	35.8	34	28.3	1.55	0.21
Prescribing	37	30.8	28	23.3	1.71	0.19
Dispensing medications	38	31.7	28	23.3	2.09	0.15
Surgery	35	29.2	32	26.7	0.19	0.67

(*) Statistically significant at $p<0.05$

In total, Table 6 points to no differences of statistical significance in the satisfaction scores between male and female participants, with a general trend of higher scores among males. The widest difference was concerning technicians in the process aspects, which was higher among males with borderline significance ($p=0.082$). Overall, the lowest satisfaction scores were related to outcomes, whereas the highest were related to process. The median total scores in both groups were around 40, indicating that at least one-half of them were not satisfied with the services provided.

Table 6: Scores of total satisfaction with service among male and female participants

	Satisfaction score (max=100)						Mann Whitney Test	p-value
	Male (n=120)			Female (n=120)				
	Mean	SD	Median	Mean	SD	Median		
Structure:								
Waiting areas	48.1	40.5	33.3	40.0	36.3	33.3	1.45	0.147
Examination rooms	48.1	40.5	33.3	48.3	35.3	33.3	0.14	0.890

Lab/X-ray	49.2	41.9	33.3	49.4	38.7	33.3	0.14	0.889
Toilets	43.6	42.3	33.3	41.4	38.2	33.3	0.15	0.884
Total	47.2	37.9	33.3	44.8	32.5	41.7	0.097	0.923
Process:								
Physicians	64.0	41.5	100.0	58.8	37.5	50.0	1.21	0.226
Nurses	66.5	40.7	100.0	64.6	36.0	50.0	0.65	0.515
Technicians	60.6	42.5	75.0	51.5	39.5	50.0	1.74	0.082
Workers	49.8	43.1	50.0	45.4	39.6	50.0	0.74	0.461
Administration	54.6	42.6	50.0	46.9	39.6	50.0	1.39	0.163
Exam/ investigations	54.8	34.8	50.0	56.5	34.2	50.0	0.44	0.662
Pharmacy	54.2	42.3	50.0	55.8	38.4	50.0	0.24	0.814
Total	58.0	32.7	57.7	54.1	29.8	50.0	1.06	0.292
Outcome:								
Treatment success	41.0	41.5	25.0	32.7	37.9	25.0	1.44	0.149
Errors	32.7	43.0	0.0	28.0	38.1	0.0	0.54	0.592
Total	36.4	40.1	22.2	30.1	35.3	22.2	1.00	0.315
Total satisfaction	47.2	31.5	41.9	43.0	29.1	38.3	0.84	0.402

Table 7 indicates the presence of moderate statistically significant positive correlations among the scores of the three satisfaction domains both in male and female participants.

Table 7: Correlation matrix of satisfaction domains scores regarding participants' characteristics by gender

Characteristics	Spearman's rank correlation coefficient			
	Satisfaction scores			
	Structure	Process	Outcome	Total
Male (n=120)				
Process	0.589**			
Outcome	0.503**	0.540**		
Age	-0.030	-0.030	-0.165	-0.117
Education	-0.122	-0.005	0.124	-0.009
Income	0.002	0.080	0.116	0.053
Crowding index	-0.153	-0.200*	-0.127	-0.160
No. of PHC visits	0.168	0.096	0.207	0.190
Female (n=120)				
Process	0.658**			
Outcome	0.668**	0.582**		
Age	-0.035	-0.070	-0.104	-0.095
Education	0.054	0.065	0.025	0.047
Income	0.010	0.086	0.088	0.058
Crowding index	-0.364**	-0.228*	-0.477**	-0.398**
No. of PHC visits	0.094	0.175	0.224	0.206

(*) Statistically significant at $p<0.05$ (**) statistically significant at $p<0.01$

Meanwhile, statistically significant negative correlations were revealed between the crowding index and all satisfaction scores among females, but only regarding the process aspect among males.

In multivariate analysis (Table 8), having a chronic disease was a negative predictor of satisfaction with structure, whereas the number of PHC visits during the last year was a positive predictor.

As regards to the process aspect score, a history of previous surgery was a negative predictor, while having an insurance plan was a positive predictor. Concerning the scores of the outcome aspect and total satisfaction, participant's age and female gender were negative predictors, whereas the number of PHC visits during the last year was a positive predictor.

Table 8: Best fitting multiple linear regression model for satisfaction scores

	Unstandardized Coefficients		Standardized Coefficients	t-test	p-value	95% Confidence Interval for B	
	B	Standard Error				Lower	Upper
Structure							
Constant	37.76	5.43		6.960	<0.001	27.04	48.49
Chronic disease	-14.02	5.56	-0.21	2.520	0.013	-25.03	-3.02
No. of PHC visits	2.24	0.79	0.23	2.840	0.005	0.68	3.80
r-square=0.10 Model ANOVA: F=6.43, p=0.002 Variables entered and excluded: age, gender, marital status, education, residence, income, crowding index, on medications, previous surgery, have insurance plans							
Process							
Constant	65.42	6.35		10.308	0.000	52.88	77.97
Previous surgery	-20.83	6.77	-0.25	-3.078	0.003	-34.22	-7.45
Have insurance plans	11.28	5.91	0.16	1.907	0.059	-0.41	22.97
r-square=0.07 Model ANOVA: F=6.20, p=0.003 Variables entered and excluded: marital status, education, residence, income, crowding index, No. of PHC visits, chronic diseases, on medications							
Outcome							
Constant	70.06	12.45		5.629	0.000	45.45	94.67
Age	-1.20	0.26	-0.38	-4.670	0.000	-1.71	-0.69
Female gender	-9.40	4.48	-0.16	-2.097	0.038	-18.25	-0.54
No. of PHC visits	1.81	0.69	0.21	2.606	0.010	0.44	3.18
r-square=0.14 Model ANOVA: F=9.02, p<0.001 Variables entered and excluded: marital status, education, residence, income, crowding index, chronic diseases, on medications, previous surgery, have insurance plans							

Total satisfaction							
Constant	66.86	10.54		6.343	0.000	46.02	87.71
Age	-0.68	0.22	-0.26	-3.146	0.002	-1.11	-0.25
Female gender	-8.69	3.79	-0.18	-2.290	0.024	-16.19	-1.19
No. of PHC visits	1.69	0.59	0.24	2.877	0.005	0.53	2.85
r-square=0.14 Model ANOVA: F=9.02, p<0.001 Variables entered and excluded: marital status, education, residence, income, crowding index, chronic diseases, on medications, previous surgery, have insurance plans							

DISCUSSION

The results of this study indicate that the satisfaction with the services provided by PHCC is generally lower among women compared to men. This is particularly evident regarding the outcomes of these services. The findings support the study research hypothesis regarding the presence of a gender difference in the satisfaction with such services.

According to the present study findings, female participants reported lower satisfaction concerning the most of the structural aspects of the services provided by the PHCCs. This was mostly evident regarding the cleanliness and comfort characteristics and features. This may reflect the feminine nature of looking closely at details regarding tidiness and spotlessness of the premises. This maybe also due to the factor that they seek comforts more than men do. On the other hand, women were more satisfied with the space of the examination rooms, the laboratories and X-ray rooms. In congruence with this, a study in Korea revealed that women tended to be more dissatisfied when the environmental conditions are inconvenient (Lee *et al.*, 2018). Additionally, a study carried out in the United States revealed that women give more emphasis to the general appearance and sensory attractiveness of sites and objects (Pearcey & Zhan, 2018).

However, the multivariate analysis of the current study could not confirm the gender difference in relation with the satisfaction with the structural aspects of the services. In fact, the gender was not identified as a factor independently and significantly influencing the score of satisfaction. Instead, this score was negatively influenced by the presence of a chronic disease, and positively influenced by the number of PHC visits during the last year. Thus, the participants suffering from chronic diseases were less satisfied with the structural aspects of the PHC services, which might be explained by their higher need for such services as the

laboratory, X-ray and other PHC facilities. On the other hand, the more frequent the participants' visits to the PHCC, the more they are satisfied with the structural aspects of the services. This might be due their gradual habituation to the place in terms of the level of cleanliness and comfort.

As regards the process aspects of the services provided by the PHCCs, the present study results revealed variable gender differences regarding its various components, but with a trend towards higher satisfaction among men in most of them. However, only the satisfaction with the behavior of the technicians was significantly higher among men compared with women. This might be attributed to a possible more tolerability of unacceptable behaviors by men compared to women. It could also be related to differences in the health needs of male and female patients as shown in a study in Saudi Arabia (Al-Khashan *et al.*, 2012). Moreover, women experience more tension and anxiety when exposed to a stressful situation as reported by Shim *et al.*, (2017) in a study in Korea. However, no gender difference was revealed in multivariate analysis.

The present study findings have shown more male satisfaction with the outcome aspects of PHCC services, particularly regarding the cooperation of the healthcare team in serving patients and the administrative efficiency for solving their problems. This was further confirmed by multivariate analysis, which identified female gender as a negative predictor of this satisfaction score. This could be explained and the men visiting the PHCCs for service often do not have time to argue on any problems, while women could have more time to spend. In fact, the great majority of the women in the present study were unemployed. In line with this, Qureshi *et al.*, (2016) highlighted that providers' behavior and communication in dealing with clients has a higher influence on women satisfaction with PHC services in comparison with men. Moreover, women may have a tendency to actively engage in interactions due to their higher motivation as claimed by Hopman-Rock, Borghouts & Leurs, (2005), which may increase their likelihood of exposure to arguments and conflicts with the healthcare team members.

Similarly, the female participants in the present study had significantly lower total score of satisfaction, and this was further confirmed in multivariate analysis. The finding is in agreement with Bener & Ghuloum, (2013) whose study findings showed higher satisfaction

regarding mental healthcare among male patients compared with female ones. On the same line, the studies by Bauer, Bendels & Groneberg, (2016) and Chen *et al.*, (2017) revealed a higher satisfaction among men compared with women. This gender difference could be due to more sensitivity of women to any defects in the service provided. In congruence with this, Zuckerman *et al.*, (2017) in a study in the United States showed that when the conditions are better, women were more likely to have negative feelings and lower satisfaction compared to men.

In addition, other factors influencing the total satisfaction score included age, which had a negative influence and number of PHC visits during the last year, had a positive influence. The negative impact of age could be explained by that older age people get tired more easily due to long waiting time and lack of comfortable place compared with younger ones. On the other hand, the participants who utilize the services more frequently may become accustomed to the place and have better relationships with the PHCC team members.

In general, the present study findings point to low satisfaction regarding the services provided by the PHCCs among male and female participants. The lowest satisfaction is with the outcomes of these services, particularly regarding the errors in prescribing and dispensing medications. This could be attributed to lack of trust, in addition to the deficiencies in the availability of many medications in the PHCCs. Moreover, when the physicians prescribe alternative medications the patients are not aware of, especially for those patients who are on regular medications for chronic conditions. The low satisfaction with the services in general, and the outcome aspects in particular, might explain the very high tendency of the participants to utilize private settings for all types of services as suggested study findings.

CONCLUSION AND RECOMMENDATIONS

In conclusion, the study indicates low satisfaction with PHC services regardless of gender. Women seem to be less satisfied with outcomes as well as in total satisfaction. The PHC administration should exert more efforts to improve clients' satisfaction, taking into account the deficiencies revealed from the present study. Periodic patient satisfaction surveys should be done regularly. Further qualitative research is proposed to explore the factors underlying gender differences in satisfaction regarding PHC services.

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