

# Patient preference for providers' gender at a primary health care setting in Alexandria, Egypt

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## ABSTRACT

**Objective:** The aim of this study is to determine patient's gender preferences in choosing general practitioners and specialists for both general and specific health issues at primary health care centers in Alexandria, Egypt.

**Methods:** A descriptive cross-sectional study was conducted at Smouha Health Center, Alexandria Governorate, Alexandria, Egypt. The study was conducted between the period January - March 2004. A pre-designed questionnaire was used. The format included 3 main sections, namely, socio-demographic, beliefs towards provider's gender, and providers' preferences of patients.

**Results:** Both male and female patients preferred a male physician for consultation and clinical management

of cases. The highest percentage of male patients (81.4%) and female patients (41.0%) preferred physician of the same gender, and such preference was of personal reasons for males (97.9%) and females (96.6%), while basing on traditions and norms for male (62.9%) and female (63.4%). Significant results of the stepwise logistic regression analysis in relation to socio-demographic factors on provider preference revealed that job and income were the significant determinants of gender preference for the sample under study.

**Conclusion:** Patients prefer physicians of the same gender, but in actual practice a male physician is believed to be more competent.

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Providers' gender is considered as one of the non-financial barriers on health care services. Such barriers are to be considered in planning for health care providers' qualifications and deployment at primary health care centers. Since Hippocrates, physicians have been aware that their appearance and gender influences the physician-patient relationship. Increasing patient comfort level during physician-patient encounters may improve communication, which is fundamental to high quality care in primary care settings.<sup>1,3</sup> Preferences for physicians' gender is an obvious and well

documented example of considerations of patients' attitudes. But research carried out in this field is rather limited to the domain of family medicine. There has been considerable debate, but surprisingly little research, on whether women prefer to consult female general practitioners (GPs) and other primary health care (PHC) workers and vice versa for men.<sup>4</sup> Physician's gender potentially affects the physician-patient relationship and its outcomes in a variety of ways. Physician's gender differences in personality and attitudes, especially with regard to gender roles, might influence interactions with both

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male and female patients. Patients also may have different expectations of their physician based on gender. Such as, they might expect the female physician to be more supportive and empathic and thus, to disclose more information, which eventually is necessary for rendering high quality health services.<sup>5,6</sup>

The aim of this study is to determine patient's gender preferences in choosing general practitioners and specialists for both general and specific health issues at primary health care centers in Alexandria, Egypt. The relationship of demographic characteristics (such as, gender, age, educational level, and economic level) on patients' responses were explored.

### Methods. Study design and data collection.

A descriptive cross-sectional study was conducted at Smouha Health Center, one of the major 6 health centers in Alexandria Governorate, Egypt. The center was randomly chosen out of the list of health centers serving urban Alexandria. Three hundred and two (N=302) useable questionnaires were necessary to generate results within a 95% confidence interval with  $\pm 5\%$  precision.<sup>7</sup> Patients were assured that their responses were voluntary and anonymous. Data collection started on January 2004 and was completed on 30th March 2004. Patients completed a short questionnaire before their consultation. We piloted the draft questionnaire among 40 patients, and consecutive patients were interviewed regarding each question for further refinements until no new comments emerged. The questionnaire was feasible for most patients in the time available before the consultation. Both the main study and pilot study had ethical approval.

**The questionnaire.** A pre-designed questionnaire was used (\*Appendix 1). The format included 3 main sections. Section 1: Socio-demographic data included; age, marital status, educational level, job, residence, decent, and economic level. Section 2: Included items related to the reason for preferring the corresponding provider of service, and the main cause of such preference as religious, traditions and norms. The section also included items related to the beliefs of the respondents regarding why they prefer choosing such provider such as; the corresponding physician is more competent and capable of understanding the complaint, and being at ease during the encounter. Section 3: Included items related to the alternative choices for provider preference such as; choosing an obstetrician/gynecologist, a physician in any other specialty, in private practice, for complicated cold surgical cases, for performing surgery in general, and in case of emergencies.

Data analysis was performed using Statistical Package for Social Sciences version 10. The tests of

**Table 1** - Socio-demographic characteristics of the sample (Alexandria, 2004).

Socio-demographic characteristics	Male N=97		Female N=205	
	n	(%)	n	(%)
<b>Age</b>				
<30 years	30	(30.9)	98	(47.8)
30 - <40	38	(39.2)	46	(22.4)
40 - <50	15	(15.5)	31	(15.1)
50 - <60	9	(9.3)	21	(10.2)
60+	5	(5.2)	9	(4.4)
<b>Marital status</b>				
Single	33	(34)	52	(25.4)
Married	60	(61.9)	139	(67.8)
Divorced/ widow(er)	4	(4.1)	14	(6.8)
<b>Educational level</b>				
Illiterate	8	(8.2)	34	(16.6)
Read and write	26	(26.8)	39	(19)
Elementary education	11	(11.3)	25	(12.2)
Secondary education	24	(24.7)	55	(26.8)
High education	28	(28.9)	52	(25.4)
<b>Job</b>				
Housewife	-	-	105	(51.2)
Unemployed	8	(8.2)	31	(15.1)
Craftsman	22	(22.7)	14	(6.8)
Employee	46	(47.4)	52	(25.4)
Private business	21	(21.6)	3	(1.5)
<b>Residence</b>				
Inside Alexandria	44	(45.4)	165	(80.5)
Outside Alexandria	53	(54.6)	40	(19.5)
<b>Decent</b>				
Urban decent	53	(54.6)	134	(65.4)
Rural decent	44	(45.4)	71	(34.6)
<b>Income</b>				
Enough and save	13	(13.4)	19	(9.3)
Enough	61	(62.9)	166	(81)
Not enough	23	(23.7)	20	(9.8)

significance used included chi-square to detect difference between male and female patients attending the center. Differences were considered significant at  $p < 0.05$ . Stepwise logistic regression analysis was performed to identify the predictor variables for provider's gender preference in general then for male physician and female preference. The socio-demographic independent variables were introduced into the analysis after adjusting the categories and dummy variables for further analyses.

**Limitations of the study.** The respondents agreed to participate in the study. Over one third of the sample (105/302, 34.7%) were housewives. The non-respondents who did not agree to participate in the study both pose a potential source of bias. Similarly, the study is limited by the fact that patients required about 3-5 minutes to complete the questionnaire before seeing the doctor, and thus, patients who came within 2-3 minutes from seeing their doctors (a small minority of consultations)

\*The full text including Appendix 1 is available in PDF format on SMJ website ([www.smj.org.sa](http://www.smj.org.sa))

could not be approached or were in a hurry to give a biased response.

**Results.** Table 1 shows the socio-demographic characteristics of the sample under study. Male patients had a mean age  $36.3 \pm 12.5$  and female patients  $33.2 \pm 12.3$ . Almost half of the females (47.8%) were below 30 years, whereas, 39.2% of the males were between 30-40 years. The highest percentage of males (61.9%) and females (67.8%) were married. As regards to educational level, 28.9% of males had higher education while 26.8% of females had secondary education. Male employees accounted for 47.4%, while more than half of the females (51.2%) were housewives. More than half of the males (54.6%) resided outside Alexandria, while the majority of females (80.5%) resided in Alexandria. The percentage of males (54.6%) and females (65.4%) were of urban decent. Similarly, both males (62.9%) and females (81.0%) had enough income.

Table 2 shows preferences and beliefs towards provider's gender. The majority of males (81.4%) prefer to be examined by a male physician, and 41% of the females prefer to be examined by a female physician. Most of the males (97.9%) and females (96.6%) admitted that their decision is based upon personal preferences. The highest percentage of males (52.6%) had no religious reasons behind their preference, while the highest percentage of females (55.6%) had religious reasons. Traditions and norms accounted for the highest percentage for both males (62.9%) and females (63.4%). A male physician is more capable of understanding the complaint as assured by the highest percentage both males (71.1%) and females (44.4%). Whereas, 73.2% of males and 50.2% of females says that a female physician is less capable of understanding the complaints during examination. Similarly, 60.8% of males and 57.1% of females believe that a male physician is more competent than a female physician according to 56.7% males and 63.4% female patients. The highest percentage of males (74.2%) and only 46.8% of females feel at ease with a male physician. Whereas, more than half of females (53.2%) feel at ease with a female physician while most of the male patients (73.2%) were not. A significant difference between males and females was detected with regard to their preference ( $X^2=63.52$ ), male physicians being more capable in understanding the complaint ( $X^2=20.46$ ) than a female physician ( $X^2=14.33$ ), feeling at ease with a male ( $X^2=20.22$ ) or female ( $X^2=26.64$ ) physician.

Table 3 shows the patients' preference for providers' gender. The highest percentage of males (81.4%) and females (81.0%) preferred a male obstetrician for his wife or for the female patient herself, 73.2% of male and only 45.9% of female

patients preferred a male physician in any other specialty, almost all of the male (90.7%) and 76.6% of female patients preferred an efficient male physician when they know of his presence, but the presence of an efficient female physician is preferred by 76.3% of male and 81.5% of female patients in complicated cases more male (76.3%) than female (57.1%) patients preferred male physicians as in the case of surgical intervention where 77.3% of males and 66.8% of females preferred male than female physicians. In case of emergency 47.4% of male patients would prefer a male physician, while 54.7% of female patients had no preference. A significant difference between males and females was observed with regards to their preference to other specialty ( $X^2=20.05$ ), presence of an efficient male physician ( $X^2=8.95$ ), in complicated cases ( $X^2=11.72$ ), and during emergencies ( $X^2=7.64$ ).

Table 4 shows the significant results of the stepwise logistic regression analysis in relation to socio-demographic factors on providers' gender preference. Results revealed that job and income were the significant determinants of gender preference. Unemployed patients were more likely to prefer a male provider (odds=0.32) than craftsmen (odds=0.13) compared to housewives. Patients with not enough income were 15 times more likely to prefer a male physician, whereas patients with an enough income were 13 times more likely to prefer a male physician compared to patients with enough income and have savings.

**Discussion.** The aim of this study is to investigate male and female patients' preferences in choosing general practitioners and specialists for both generally and specific health issues at primary health care centers. The myth that prevails in Arab and Islamic countries of preferring males to females in different aspects of everyday life seems to be represented in the results of this study. Both male and female patients preferred a male physician for consultation and clinical management of cases throughout the administered questionnaire. According to our results the highest percentage of male patients (81.4%) and female patients (41.0%) preferred a physician of the same gender, and such preference was of personal reasons for males (97.9%) and females (96.6%), and basing on traditions and norms for male (62.9%) and female patients (63.4%). The highest percentage of both male and female patients had an attitude that male physicians were more capable of understanding the complaints, male (71.1%) and female patients (44.4%) and an opposite attitude towards female physicians, male (73.2%) and female patients (50.2%). It has been stated that patients prefer

**Table 2** - Preferences and beliefs toward provider's gender (Alexandria, 2004).

Beliefs towards providers' gender	Male N=97		Female N=205		Test of significance
	n	(%)	n	(%)	
<b>Preference</b>					
Male physician	79	(81.4)	67	(32.7)	63.52 <i>p</i> =0.0001
Female physician	8	(8.2)	84	(41)	
No preference	10	(10.3)	54	(26.3)	
<b>Preference basis</b>					
Personal decision	95	(97.9)	198	(96.6)	0.41* <i>p</i> =0.72
Spouse decision	2	(2.1)	7	(3.4)	
<b>Reasons behind preference</b>					
<b>Religious</b>					
Yes	46	(47.4)	114	(55.6)	1.77* <i>p</i> =0.21
No	51	(52.6)	91	(44.4)	
<b>Traditions and norms</b>					
Yes	61	(62.9)	130	(63.4)	0.008* <i>p</i> =1
No	36	(37.1)	75	(36.6)	
<b>Belief</b>					
Male physician is more capable of understanding the complaint					
Yes	69	(71.1)	91	(44.4)	20.46 <i>p</i> =0.0001
No	22	(22.7)	73	(35.6)	
Cannot tell	6	(6.2)	41	(20)	
Female physician is more capable of understanding the complaint					
Yes	23	(23.7)	87	(42.4)	14.33 <i>p</i> =0.001
No	71	(73.2)	103	(50.2)	
Cannot tell	3	(3.1)	15	(7.3)	
Male physician is more competent than female physician					
Yes	59	(60.8)	117	(57.1)	2.65 <i>p</i> =0.26
No	18	(18.6)	29	(14.1)	
Cannot tell	20	(20.6)	59	(28.8)	
Female physician is more competent than male physician					
Yes	26	(26.8)	32	(15.6)	5.45 <i>p</i> =0.06
No	55	(56.7)	130	(63.4)	
Cannot tell	16	(16.5)	43	(21)	
Feel at ease with male physician					
Yes	72	(74.2)	96	(46.8)	20.22 <i>p</i> =0.0001
No	18	(18.6)	84	(41)	
Cannot tell	7	(7.2)	25	(12.2)	
Feel at ease with female physician					
Yes	23	(23.7)	109	(53.2)	26.64 <i>p</i> =0.0001
No	71	(73.2)	85	(41.5)	
Cannot tell	3	(3.1)	11	(5.4)	

\* - Fisher's exact test

**Table 3** - Patients' preference for providers' gender of the sample under study (Alexandria, 2004)

Patients' preference for providers' gender	Male N=97		Female N=205		Test of significance
	n	(%)	n	(%)	
<b>Obstetrician/Gynecologist. Which do you prefer for your wife/you (female patient)</b>					
Male physician	79	(81.4)	166	(81)	0.37 p=0.83
Female physician	13	(13.4)	25	(12.2)	
No preference	5	(5.2)	14	(6.8)	
<b>Other specialties. Which do you prefer for your wife / you</b>					
Male physician	71	(73.2)	94	(45.9)	20.05 p=0.0001
Female physician	16	(16.5)	62	(30.2)	
No preference	10	(10.3)	49	(23.9)	
<b>If you know that an efficient female physician is present whom do you choose</b>					
Male physician	23	(23.7)	38	(18.5)	2.85* p=0.24
Female physician	74	(76.3)	167	(81.5)	
<b>If you know that an efficient male physician is present whom do you choose</b>					
Male physician	88	(90.7)	157	(76.6)	8.95* p=0.01
Female physician	9	(9.3)	45	(23.4)	
<b>In case of complicated (cold) cases</b>					
Male physician	74	(76.3)	117	(57.1)	11.72 p=0.003
Female physician	7	(7.2)	40	(19.5)	
No preference	16	(16.5)	48	(23.4)	
<b>In case of emergency</b>					
Male physician	46	(47.4)	64	(31.2)	7.64 p=0.02
Female physician	9	(9.3)	29	(14.1)	
No preference	42	(43.3)	112	(54.7)	
<b>In case of surgical intervention</b>					
Male physician	75	(77.3)	137	(66.8)	3.79 p=0.15
Female physician	9	(9.3)	33	(16.1)	
No preference	13	(13.4)	35	(17.1)	
* - Fisher's exact test					

**Table 4** - Stepwise logistic regression analysis for factors affecting provider gender preference.

Variable	Odd's ratio	95% CI for odd's ratio		Significance
		Lower	Upper	
<b>Job</b>				
Housewife*	1			X <sup>2</sup> =60.83 p<0.0001
Unemployed	0.32	0.10	0.94	
Craftsman	0.13	0.05	0.38	
<b>Income</b>				
Enough and save*	1			0.002
Enough	13.34	2.66	66.87	
Not enough	15.05	2.57	88.09	
<b>Constant</b>	-2.36			0.03
* - Fisher's exact test, CI - confidence interval				

physicians of the same gender for some health problems and not for others, and this is especially true in obstetrics/gynecology, where patients may have a variety of reasons for requesting female physicians.<sup>8</sup> Such preference could be related to religious beliefs and norms, yet causes behind such preference require further investigation.

A similar finding was encountered but without significant difference between male and female patients as regards to male physicians being more competent than female physicians, a high percentage of both male and female patients agreed upon this. In a study on gender preference in internal medicine practice involving 210 males (40.9%) and 304 women (59.1%). Results showed that 50-60% of the patients preferred a physician of the same gender, with the remainder expressing no preference. The women preferred female physicians for family problems (23%) and depression (23%). The male physicians were more often perceived to be unorganized than the females (24% versus 5%),

while the female physicians were more often described as humane (15% versus 10%). Characteristics expressing technical competence were more often attributed to the male than to the female physicians, while those expressing empathy were more often attributed to the female physicians. Patients prefer physicians of the same gender for some health problems and not for others.<sup>8</sup> Although almost half of the male patients (45.4%) and over one third of the female patients (34.6%) were of rural decent, yet, both male and female patients in our study preferred male physicians throughout the administered questionnaire when it came to technical and clinical aspects as preference. Exceptionally, female providers were preferred by female patients in obstetrics/gynecology, similarly, male patients preferred female providers for their wives. This finding would be expected for a sample in an Islamic country like Egypt, with such religious and traditional background. Such findings are in accordance with a study that included Muslim female patients, preferred female rather than male physicians.<sup>9</sup> A few studies investigating women's consulting patterns report that in general, more choose a female than a male GP. Consultation behavior and expressed preferences are closely related to the availability of, and previous experience of consulting, women GP.<sup>4,10-12</sup> On the contrary, a study reported that for most women, physician's gender is not of primary importance in the selection of an obstetrician/gynecologist. It has been stated that there were no gender preferences for the more "instrumental" health professions (example, surgeons, anesthesiologists).<sup>13</sup> Gender preferences are stronger for those health professions more likely engaged in intimate and psychosocial health problems (example, gynecologists and GPs). Expressed preferences do not relate to gender stereotypes of gender differences in instrumentality, expertise, efficiency, consultation length, and personal interest. The majority of persons who prefer female health professionals indicate that they talk more easily to females than to males, and feel more at ease during (internal) examination by females than by males. Persons who prefer male health professionals use the same reasons in favor of males. The discussion relates to gender differences in the communication style of male and female physicians.<sup>14-16</sup> Logistic regression results showed that the type of job and economic level both contributed in explaining the variance of gender preference for the sample under study, indicating that in developing countries a male physician is still viewed as more competent than a female physician and once the patient has the financial capabilities, he/she would prefer consulting a male physician.

As identified from the study, patients prefer physicians of the same gender, but in actual practice a male physician is believed to be more competent.

It is recommended that female physicians be distributed among family planning centers and outpatient gynecology clinics and to encourage the postgraduate studies for female physicians in such domain, whereas, male physicians are distributed among various other specialties.

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