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Research Article

**PUBLIC AWARENESS AND PERCEPTION ABOUT THE ROLE  
OF FAMILY PHYSICIANS IN SAUDI ARABIA: A CROSS-  
SECTIONAL STUDY****Abdullah Nasser AlBarrak<sup>1</sup>, Abdullah Ahmed Aloraini<sup>1</sup>, Marwah Khaled Altawyan<sup>2</sup>,  
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12713, Saudi Arabia (kfh@kfshrc.edu.sa)**Abstract:***Objectives: To study the perception about the role of family physicians (FPs) among general population of Saudi Arabia.**Method: An online survey was conducted using a convenience sample of 1272 participants aged 18 years and above from the five main regions of Saudi Arabia, namely central, western, northern, eastern, and southern areas. A link to the survey was sent to the respondents through social media applications. SPSS was used for data management.**Results: A total of 1272 valid responses were analyzed, of which 54.6% were females and 45.4% were males. The median age of respondents was 32 years (rang 18 to 75 years). The vast majority (88.6%) did not have a regular FPs. The majority were aware of the principles (80.7%) and the essential role of family medicine (74.4%), and health conditions that FPs can and cannot manage. The majority (77.6%) agreed on the value of involving FPs in their care, the priority of FPs in the action of health-seeking (60.8%), and the sufficiency of FPs' expertise (55.9%). However, only 29.9% had a positive experience with FPs. In addition, a significant proportion (60.2%) preferred to firstly seek health care from specialists from other specialties.**Conclusions: We found that participants were fairly aware of the basic role of family medicine and perceived involving FPs as important to the healthcare system. However, public programs are recommended to highlight the role of family medicine to fill gaps in communication between care seekers and providers and to improve physician-patient relationship which may enhance the overall satisfaction with healthcare system.***Key words:** family medicin; family practice; FPs; Saudi arabia, awareness.**Corresponding author:****Abdullah Nasser AlBarrak,**

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**INTRODUCTION:**

Family medicine is one of the most important specialties in medicine as it is concerned with the overall healthcare of all individuals regardless of sex, age, and affected organ or system entity (1,2). It integrates the clinical, biological, and behavioral sciences and stands on important principles, namely comprehensiveness, coordination, continuity of care, and accessibility (3). The specialty of family medicine is patient-centered, family-focused, evidence-based, and problem-oriented (4). In the Kingdom of Saudi Arabia (KSA), family medicine dates back to the early 1980s when it was started at a military hospital in Riyadh. After that, fellowship programs in family medicine were started in King Saud University and King Faisal University, followed by Arab board in 1991 (1,5). Nowadays, there are 2282 primary health care centers (PHCCs) throughout KSA, 60% of which are located in rural areas. Family physicians (FPs) comprise 10% of all physicians working in PHCCs (1).

General practitioners (GPs) and FFPs are a critical factor in the healthcare system, whose main role is to provide patients with health services in community prevention, health care, treatment, rehabilitation, education, and family planning (6,7). The level of public awareness about the role of GPs and FPs is vital to obtaining proper healthcare as it may play an important role in the health-seeking behavior (6). Some reports found that tertiary hospitals are overwhelmed by patients seeking specialized medical centers and skipping PHCCs, where most of their needs can be fulfilled. This may lead to a long waiting time and travel distances in some cases, as well it may increase the possibility of patients' dissatisfaction (8–10). Therefore, studies addressing patients' awareness of the role of FPs are needed. Previous studies looking at the relationship between patients' perception and utilization of PHCCs services have found a positive association, with patients having good perception of the role and quality of health service provided tending to rate and utilize them more (11,12). A study by Al-Omar and Bin Saeed examined factors influencing patients' utilization of PHC providers in KSA. Of these factors, the level of patients' education and their perception of care quality were of significant importance (13).

Doctor-patient relationship rests on mutual respect, trust, and confidence and plays an essential role in optimizing health outcomes, which can be challenging to both patients and doctors themselves (14–16). Several studies have demonstrated that patients' perception of the role of their doctors

impacts their compliance and the overall health outcomes, especially when they suffer from chronic, sensitive, and stigmatizing health problems such as diabetes mellitus, mental health problems, and cancer (16–20).

Overall, patients' acceptance of involvement of FPs has been reported to be high. Patients, especially the chronically ill, were found to value the continuity of care provided by their doctors and the feeling of security in the presence of a regular GP (21–23). Patients' acceptance and satisfaction with FPs has also been shown to be influenced by patients' trust and desire for meaningful communication strategies (24–29).

Several studies have indicated that patients and their families do not fully understand their doctors' roles and responsibilities (30,31). This lack of knowledge may be attributed, in part, to poor communication skills from the perspective of the treating doctor (30) or patients level of awareness of their doctors' role.

In recent years, the uncertain identity and future of family medicine as a medical discipline is concerning to many in the field. Therefore, this study aims to evaluate Public's perception about the role of FPs in KSA. The findings of the current study may highlight the gaps in patients' knowledge, which are important to decision-making and strategies to ensuring patients' satisfaction with the healthcare system.

**METHODS:****Study population and design**

Kingdom of Saudi Arabia (KSA) has a total of 33.4 million inhabitants, with 20.8 million Saudis (32). It is divided into five regions, namely central region (Riyadh and Qassim); Western region (Tabuk, Madinah, and Makkah); Northern region (Northern borders, Jawf, and Ha'il); Southern region (Baha, Jizan, Asir, Najran); and Eastern region (Eastern Province) (33). This is an observational cross-sectional survey targeting Arabic-speaking adults aged 18 years and above and residing in Saudi Arabia to evaluate the perception about the role of FPs in KSA.

Using the convenience sampling method, the final sample consisted of xxx participants, with xxx agreed to take part in the survey, giving a response rate of xx%. Inclusion criteria were *being able to understand and write in Arabic; aged ≥18 years; resident in KSA; and giving a written consent for completing an online survey*. Those who did not meet the aforementioned criteria were excluded from the study. Participants were recruited for x months, from

xx to xx, 2018, through social media and targeted by their age and place of residence.

### Questionnaire

*An online link to the survey was sent to the participants through different social media websites and applications. The survey was adopted from a previous study (22) and modified to cover the aims of the present study. The author translated the survey from English to simple Arabic using back translation. It is consisted of five main parts. The first part ensured the participants' anonymity and stated the study aims with two choices to either accept to participate or not. After giving their consent, participants were directed to the next part. The second part included some demographic information such as age, sex, residence, and employment status. The third part examined the participants' knowledge about the role of FPFs, concerns regarding FPs involvement, and whether participants would choose to have a FFPF involved in their healthcare. The fourth part asked about perception and experiences of having a FFPF involved in participants' healthcare using a series of Likert scales. The fifth part explored the overall satisfaction, experience, and comfort with seeing FPFs in the PHCC and other health facilities. The survey took approximately x minutes to complete.*

### Ethical statement

All participants were asked for their willingness to take part in the study and the objectives of the study

were clearly explained to them at the beginning of the survey. Before a participant proceeds to the rest of the survey, he/she was asked to provide a written consent to participation. Names and contact details were not included in the survey.

### Statistical analysis

Data were analyzed using Statistical Package of Social Sciences (SPSS) Version 20 (SPSS Inc., Chicago, IL). Before analysis, data mining was done to check for the completeness of responses and coding errors. Categorical variables such as sex and education level were presented as frequencies and percentages, and continuous variables such as age were presented as mean and standard deviation (SD). Comparison between two categorical variables was performed using  $X^2$  tests. Differences were considered statistically significant if  $P \leq 0.05$ .

### RESULTS:

A total of 1278 participants agreed to take part in this study. Six of them (0.5%) were under 18 years and excluded from the final analysis. Sociodemographic characteristics are detailed in Table 1. The median age of respondents was 32 years (rang 18 to 75 years); 54.6% were females and 45.4% were males; the majority of participants were from the central region of KSA; the last education level of the majority was university (64.4%); and 58.4% were having a job. The vast majority (88.6%) did not have a regular FFPF.

Table 1 Sociodemographic characteristics of study participants (N=1272)	
Variables	n (%)
Sex	
Male	577 (45.4)
Female	695 (54.6)
Age group (in years)	
18–29	623 (40.8)
30–39	377 (29.6)
40–49	199 (15.6)
50–59	129 (10.1)
60 or older	48 (3.8)
Residence in Saudi Arabia	
Central region	623 (49.0)
Western region	276 (21.7)
Northern region	53 (4.2)
Eastern region	230 (18.1)
Southern region	90 (7.1)
Education level	
Postgraduate	225 (17.7)
University	819 (64.4)
High school	211 (16.6)
Intermediate or below	17 (1.3)
Job status	
Having a job	743 (58.4)
Not having a job (including students)	529 (41.6)
Do you have a regular FP?	
Yes	145 (11.5)
No	1127 (88.6)

Table 2 describes participants' knowledge about the role of FFPs and their involvement in the healthcare. Of respondents, 58.0% were aware of the FFPs' role and 69.3% believed that FP is an important part of health system. Overall, the majority were aware of the principles (80.7%) and essential role of family medicine (74.4%), health conditions that FFPs can (60.4%) and cannot manage (75.1%).

Table 2 Participants' knowledge about the role of FPs (N=1272)	
Knowledge	n (%)
Are you aware of the role of FP?	
Yes	738 (58.0)
No	534 (42.0)
Is FP an important part of health system?	
Yes	881 (69.3)
No	69 (5.4)
Unsure	322 (25.3)
Is FP a doctor who finished medical school?	
Yes	866 (68.1)
No	104 (8.2)
Unsure	302 (23.7)
Is FP a GP?	
Yes	947 (20.4)
No	634 (49.8)
Unsure	378 (29.7)
A FP is concerned with the total healthcare of all individuals regardless of sex, age, affected organ or system entity.	
Agree	947 (74.4)
Neutral	228 (17.9)
Disagree	97 (7.6)
The main role of FP is to provide patients with health services in community prevention, health care, treatment, rehabilitation, education, and family planning.	
Agree	1026 (80.7)
Neutral	199 (15.6)
Disagree	47 (3.7)
A FP can prescribe medications.	
Agree	953 (74.9)
Neutral	246 (19.3)
Disagree	73 (5.7)
A FP can treat common chronic diseases such as DM, HTN, and bronchial asthma.	
Agree	768 (60.4)
Neutral	281 (22.1)
Disagree	223 (17.5)
A FP can treat emergent conditions such as heart attack and stroke.	
Agree	287 (22.6)
Neutral	391 (30.7)
Disagree	594 (46.7)
A FP can perform major surgeries such as cholecystectomy and appendectomy.	
Agree	52 (4.1)
Neutral	265 (20.8)
Disagree	955 (75.1)

Table 3 describes participants' perceptions and experiences of having a FP involved in their healthcare. Regarding perceptions, the majority agreed on the value role of having FPs involved in their care (77.6%), the priority of FPs in the action of health-seeking (60.8%), and the sufficiency of FPs' expertise (55.9%). However, a significant proportion of participants (60.2%) reported that they usually prefer to firstly see a specialist or consultant from specialties other than family medicine.

Regarding participants' experiences and satisfaction with FP, the majority agreed that FPs are professional (55.7%), attentive to their health concerns (53.3%), and take a complete medical history (63.5%) and physical examination (44.0%). Also, the majority (66.0%) thought they could discuss all health issues with a FP. Although 39.9% of participants were generally satisfied with having a FP involved in their care, only 29.9% had a positive experience with FPs. Nearly a quarter of participants complained of long visits (25.2%) and long waiting time (23.4%) in family

medicine clinics. Overall, these results suggest that participants in our study have good perceptions of having FPs though a considerable proportion were less satisfied due, in part, to factors attributed to the provided care.

Perceptions of FP involvement in healthcare	% Agree or strongly agree*	% Disagree or strongly disagree
It is valuable to have a FP in my healthcare.	987 (77.6)	66 (5.2)
FP is the first doctor I would like to see in most of my health conditions.	774 (60.8)	184 (14.5)
I usually prefer to have a specialist or consultant from other specialties involved in my healthcare.	766 (60.2)	146 (11.5)
I think that the FP don't have enough medical expertise to be involved in my healthcare.	190 (14.9)	711 (55.9)
Experiences and satisfaction with FPs	% Agree or strongly agree	% Disagree or strongly disagree
The FP is professional.	708 (55.7)	53 (4.2)
The FP is attentive to my concerns.	678 (53.3)	79 (8.2)
The FP takes a complete history of my complaint.	808 (63.5)	89 (7.0)
I can discuss all health issues with the FP.	840 (66.0)	94 (7.4)
The FP performs a complete physical examination.	560 (44.0)	194 (15.3)
I feel comfortable with a FP taking my medical history.	715 (56.7)	78 (6.1)
Having a FP involved in my care was a positive experience.	380 (29.9)	121 (9.5)
I am usually satisfied from seeing a FP.	508 (39.9)	103 (8.1)
Having a FP involved in my care was a positive experience.	380 (29.9)	121 (9.5)
My visit lasts longer when I visit a FP.	320 (25.2)	206 (16.2)
It takes a longer waiting time to see a FP.	298 (23.4)	201 (15.8)

\* One category (i.e. "neutral") was not included in this table.

Table 4 shows that having a regular FP was significantly associated advanced age ( $P<0.000$ ). The difference was not significant with regard to sex ( $p=0.230$ ).

Variables	Had a regular FP	Did not have a regular FP	P value
Sex			
Male	59 (10.2)	518 (89.8)	0.230
Female	86 (12.4)	609 (87.6)	
Age group (in years)			
18–29	47 (9.1)	472 (90.0)	<0.000
30–39	41 (10.9)	336 (89.1)	
40–49	15 (7.5)	199 (92.5)	
50–59	29 (22.5)	100 (77.5)	
60 or older	13 (27.1)	35 (72.9)	

## DISCUSSION:

The main aim of the present study was to evaluate the perception about the role of family FPs in KSA. Although 42.0% thought they were not, the analysis showed that most respondents were aware of the role of FP. They had positive attitudes toward the importance of FPs in the health system, they were aware of the basic role of family medicine, and the FPs' scope of practice. In general, these findings are consisted with those of previous studies from Ireland (34), Denmark (35), and Nairobi (36). Our findings are also consisted to those studies that found a

general tendency to initially seek healthcare from a specialist from other specialties (36).

Whilst the present study showed good levels of awareness about FPs' role in the healthcare system, there were gaps that necessitate more awareness on the role of FPs, as well as enabling FPs to reduce them. Prior studies have found that the ability of FPs to treat common diseases and to counsel patients regarding lifestyle aspects are important in saving patients' time, money, and in disease prevention (37).



In terms of FPs' involvement in healthcare, most participants perceived the role of FPs as important. This is evident in that almost 78% of respondents valued the role of FPs as the initial healthcare providers. Still there are gaps related to trusting FPs' medical expertise among the current sample. Gulnaz *et al* reported that patients in PHCCs had low confidence in FPs' ability to manage TB, HIV, diabetes, depression, and anxiety (36). These gaps could be addressed by clearly defining the expected care from FPs and modifying patients' expectations and health-seeking behaviors through proper communication strategies (36).

In response to the statement 'Having a FP involved in my care was a positive experience,' only 29.9% agreed indicating lower levels of satisfaction as compared to awareness levels. This finding is contrary to other studies (22) which reported higher levels of satisfaction with involvement of FPs in the health care. This indicates the need to bridge communication gaps in the physician-patient relationship, as a trusting relationship plays an essential role in determining patients' satisfaction with the healthcare system (24–29,38).

We found no significant sex difference in having a regular FP ( $p=0.230$ )

(Table 3). But a significant difference was found among different age groups with older respondents significantly more likely to have a regular FP ( $p<0.000$ )

(Table 3). This confirms the findings of previous studies that found care provided by FPs to be significantly valued by older patients and those who were chronically ill (21–23).

#### Study limitations

Despite the large sample size in the present study, it has some limitations. Firstly, it is a convenient sample based on an electronic survey, so sampling bias is inevitable. Secondly, the adopted questionnaire was not validated.

#### CONCLUSIONS:

**In general, participants in this study were aware of the basic role of family medicine and perceived involving FPs as important to the healthcare system. However, there were some gaps in the physicians-patient communication which may contribute to the dissatisfaction reported by a significant proportion of the present sample. We suggest that general population could be addressed by clearly defining the role of FPs and**

**the expected care obtained from family medicine, as well as by designing a healthcare system that encourage primary care utilization and ensuring that care is provided by competent FPs.**

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