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# Help-seeking Behavior among Adults in Riyadh, Saudi Arabia - A Cross-sectional Study

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#### **Abstract**

**Background:** Management of people's health problems should be performed by qualified health professionals. However, an increasing number of individuals claim the ability to manage diseases despite not having received medical training. This study sought to identify the sociodemographic and socioeconomic characteristics of people seeking health-related assistance from nonprofessionals, their reasons for seeking help and sources of health information available to the public.

**Methods:** A cross-sectional descriptive study was conducted in Riyadh, Saudi Arabia, from September 2014 to March 2015. The sample size was 195 Saudi adults. An online survey consisting of a well-structured questionnaire was created using Google forms and distributed via a link to a website.

**Result:** A total of 269 participants met our criteria and completed the questionnaire. One hundred ninety-one participants (71%) were female and 152 (56.5%) were 30 years old or younger. The majority were unmarried 164 (61%) and 191 (71%) had a university education or higher. More than half of the participants (143; 53%) consulted a medical doctor (MD) and 100 (37%) relied on self-help or consulted relatives. The older the patient, the more likely he or she was to consult a physician rather than depend on self-help or advice from relatives. The majority of married participants consulted a physician (69; 65.7%); many of the unmarried participants (72; 43.9%) preferred self-help and consultation with relatives. Approximately half of the participants who preferred self-help and relatives' advice perceived a benefit; the other half did not notice a difference.

**Conclusion:** Our findings indicate that help-seeking behavior in the Saudi community requires improvement. Approximately half of the participants sought non-medical help. We hope this study will motivate investigators to research variety of help-seeking behaviors and their effects, such as the influence of the Internet on self-care.

**Keywords:** Help-seeking behavior; Riyadh; Traditional healer; Pharmacists; Self-help; Doctors

## List of Abbreviations:

ENT: Ear, Nose and Throat; GI: Gastrointestinal; HSB: Help-Seeking Behavior; KSA: Kingdom of Saudi Arabia; MD: Medical Doctor; MOH: Ministry of Health; PHC: Primary Health Care; SPSS: Statistical Package for the Social Sciences; TH: Traditional Healer; WHO: World Health Organization

## Introduction

Help-seeking behavior (HSB) is an appropriate way to seek a solution for a health problem and requires suitable interaction with a medically trained professional [1]. HSB has three main components: a health issue (physical or psychological), a person who needs help to address the health issue, and a source of help. For the purpose of the present study, we classified the source of help as a physician,

pharmacist, or traditional healer (TH) or self-treatment. We defined a medical doctor (MD) as a person lawfully trained to practice medicine [2]. For "pharmacist" we used the World Health Organization (WHO) definition: professionals who "store, preserve, compound, and dispense medicinal products." Furthermore, they counsel patients on the proper use and adverse effects of drugs and medicines prescribed by MDs and other health professionals. Additionally, they contribute to researching, testing, preparing, prescribing, and monitoring medicinal therapies to optimize human health. Types of pharmacists include hospital, industrial, retail, and dispensing pharmacists [3]. Finally, self-treatment is an attempt to relieve one's own health problems using a treatment without professional supervision [4].

Traditional medicine professionals implement knowledge, skill, and practice gained through cultural experience. They typically examine patients and treat health problems (physical and psychological) and "research, develop and implement treatment plans using applications such as acupuncture, Ayurvedic, homeopathic and herbal" [3]. In the Saudi community, the THs are nonprofessionals as they do not have any certification and who base their therapies on traditional beliefs [5].

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Finally, there are faith healers, who apply the traditions of the prophet Mohammad by reading the Holy Quran to alleviate illness [6].

The current study demonstrates the importance of HSB in the community. Cost and prevalence of diseases are reduced by treating the initial disease rather than correcting problems resulting from irresponsible interventions and poor practices of pharmacists and THs. In the Saudi community, misconceptions exist regarding pharmacists and THs. Furthermore, the availability of health centers is limited in some areas, which increases the likelihood that individuals will seek help from nonprofessionals or treat themselves.

The majority of people in Riyadh (79%) said they treated themselves; fewer individuals (21.4%) had received a specialist consultation, and 77.3% sought medically trained practitioners (3.8% pharmacists, 16.7% THs, and 2.2% self-treatment) [7]. Another study showed that 90.5% of mothers consulted physicians when their children less than two years of age were ill [8]. Furthermore, in Riyadh, most people who visited a TH were elderly (+60 years old), female, married or divorced, and illiterate. Common medical problems for which people sought help from a TH were abdominal pain, flatulence, low back pain, depression, and headache.

The most common reasons for visiting a TH were a belief in the success of alternative medicine and a preference for natural remedies [5]. More females (82%) than males (73%) sought help from medically trained practitioners. Five percent of males sought help from a pharmacist, compared with 2.2% of females. Twenty-one percent of males and 10% of females sought help from a TH [7]. Additionally, Chinese-American males were more likely than females to seek help from physicians but were less likely to seek help from friends [9].

Young men were less likely than women to suggest visiting a doctor for mental problems. In fact, only 16.4% of males thought that a severely depressed person should visit a doctor [10]. Another study showed that of women younger than 45 years, 76% sought help from a medically trained practitioner, 4.5% sought help from pharmacies, 17.3% sought help from a TH, and 2.2% used self-treatment. Moreover, for women older than 45 years, 89.5% sought help from a medically trained practitioner, 9.1% sought help from a TH, and 1.5% used selftreatment.

The same study found that for Saudis with a low education level, 85.7% sought help from a medically trained practitioner, 6.7% sought help from a TH and 6.7% practiced self-treatment. For Saudis with a higher education level, 77.3% sought help from a medically trained professional, 4.2% sought help from a pharmacist, 12.6% sought help from a TH, and 6.5% practiced self-treatment [7].

A Chinese-American study showed that negative life events and emotional distress reduced HSB, but it was higher in individuals with insurance coverage. Unemployed people were more likely to seek help from physicians [9]. Studies have shown that the most common reasons people cite for not seeking help for fecal incontinence are that they do not know how to ask for help and they feel embarrassment or shame. In addition, they said they thought that the situation was not serious or they lacked knowledge of treatment options [11].

Few Saudi studies of HSBs have been reported in the literature. The objectives of the current study were as follows: (1) to identify the sociodemographic and socioeconomic characteristics of people seeking the help of a nonprofessional, (2) to determine why patients seek help from non-professionals and (3) to identify sources of health information available to the public.

## Methods

A cross-sectional descriptive study was conducted in Riyadh, Saudi Arabia, from September 2014 to March 2015. The target population was Saudi adults with health problems in the eight weeks preceding the study who lived in Riyadh and used Internet services. We approached participants via Twitter, Facebook, Google Plus, and email. The inclusion criteria were being Saudi, Arabic-speaking, and over 18 years of age with access to a computer and Internet services and at least one account of the following type: Twitter, Facebook, Google Plus, or email. Both men and women were eligible. The exclusion criterion was chronic health problems for more than eight weeks (to avoid recall

The estimated Saudi population over 18 years of age in Riyadh as of 2015 was 1,637,200 [12,13]. According to the Communication and Information Technology Commission, 97% of the population aged 12 years old and above in Riyadh use Internet services [14]. For the purpose of the present study, we conservatively estimated that 85% of people over 18 years old in Riyadh use Internet services. At a 95% confidence level, the estimation accuracy was 5%, and the estimated proportion was 85%. The target sample size was at least 195 Saudi adults.

Non-probability convenience sampling was used. Participants responded to our online survey, which consisted of a questionnaire randomly distributed via a link on Twitter, Facebook, or Google Plus or in email. Data were collected with an online questionnaire using Google Forms, which was partially taken from the published research of Al Shammari [7]. The questionnaire was in Arabic, which facilitated administration and completion by the general public. It included sociodemographic data such as age, gender, level of education, occupation, income, marital status, and source of medical knowledge. It also inquired about health problems in the preceding eight weeks, what type of practitioner was consulted, and the result of the consultation. Additionally, we asked why people sought help from a nonprofessional. We tested the questionnaire in a pilot study prior to the main study.

A total of 269 participants completed the questionnaires. We do not know the time taken by each participant to fill out the questionnaire. But, based on the pilot study, the time was less than 5 minutes. Statistical analyses were performed using the Statistical Package for the Social Sciences (SPSS), version 19 (SPSS Inc., Chicago, IL, USA). A chi square test or Fisher's exact test was used to compare the demographic characteristics with all the nominal variables. Statistically significant differences were assumed when the P value was less than 0.05.

The participants were asked to consent to the study after a clear explanation of the objectives and content of the questionnaire. The questionnaire stated that participation was voluntary and data would be used for research purposes. For confidentiality purposes, the questionnaire did not request the name of the respondent. Identifying information for Twitter, Facebook, Google Plus or email accounts was not recorded. The ethics review committee of the College of Medicine, King Saud University, Riyadh, approved this study.

## Results

The estimated sample size was 195 participants, but a total of 381 participants responded to the questionnaire. Only 269 people met the criteria and completed the study questionnaires. Therefore, a total of 269 complaints by the participants were analyzed in detail.

Characteristics	N	MD	P	Т	s	(P value)
Gender				,	'	'
Male	78 (29%)	40 (51.3% )	6 (7.7%)	3 (3.8%)	29 (37.2%)	0.135
female	191 (71%)	103 (53.9%)	4 (2.1%)	13 (6.8%)	71 (37.2%)	
Age						'
18-29	152 (56.5%)	68 (44.7%)	6 (4%)	13 (8.5% )	65 (42.8% )	0.032
30-44	90 (33.5%)	57 (63.3%)	2 (2.2% )	2 (2.2%)	29 (32.2% )	
≥45	27 (10%)	18 (66.7% )	2 (7.4% )	1 (3.7%)	6 (22.2% )	
Marital Status	·					
Un Married	164 (61%)	74 (45.1%)	5 (3%)	13 (7.9%)	72 (44%)	0.004
Married	105 (39%)	69 (65.7%)	5 (4.7%)	3 (2.9%)	28 (26.7%)	
Level of Education						'
Below Secondary school	11 (4.1%)	6 (54.5%)	0 (0%)	1 (9.1%)	4 (36.4%)	0.809
Secondary school	67 (24.9%)	31 (46.2%)	4 (6%)	4 (6%)	28 (41.8%)	
University	191 (71%)	106 (55.5%)	6 (3.1%)	11 (5.8%)	68 (35.6%)	
Occupation	·					
Do not work	17 (6.3%)	5 (29.4%)	1 (5.9%)	1 (5.9%)	10 (58.8%)	NA NA
Housewives	34 (12.6%)	24 (70.5%)	1 (3%)	1 (3%)	8 (23.5%)	
Students	118 (43.9%)	56 (47.4%)	4 (3.4%)	10 (8.5%)	48 (40.7%)	
Teachers	20 (7.4%)	10 (50%)	1 (5%)	1 (5%)	8 (40%)	
Administrative	36 (13.4%)	22 (61.1%)	1 (2.8%)	1 (2.8%)	12 (33.3%)	
Military	13 (4.8%)	8 (61.5%)	0 (0%)	1 (7.7%)	4 (30.8%)	
Health workers	10 (3.7%)	5 (50%)	0 (0%)	0 (0%)	5 (50%)	
Others	21 (7.8%)	13 (61.9%)	2 (9.5%)	1 (4.8%)	5 (23.8%)	
Income						'
<3.000 SR	90 (33.5%)	43 (47.8%)	2 (2.2%)	9 (10%)	36 (40%)	NA NA
3.000-6.999 SR	26 (9.7%)	18 (69.2%)	0 (0%)	2 (7.7%)	6 (23.1%)	
7.000-13.999 SR	56 (20.8%)	31 (55.3%)	2 (3.6%)	1 (1.8%)	22 (39.3%)	
14.000 SR ≤	23 (8.5%)	13 (56.5%)	2 (8.7%)	0 (0%)	8 (34.8%)	
Other	74 (27.5%)	38 (51.3%)	4 (5.4%)	4 (5.4%)	28 (37.8%)	
N: Number of Participants; MD: Me	edical Doctor; P: Pharmaci	st; T: Traditional Healer	rs; S: Self-help + Re	elative, etc.; NA: Not	Applicable	'

**Table 1:** Sociodemographic characteristics of 269 participants, with respect to different consultations.

Table 1 shows the sociodemographic characteristics of the participants; 191 (71%) were female, and 152 (56.5%) were 30 years old or younger. The majority were unmarried 164 (61%), and approximately 191 (71%) had a university education or higher. Approximately 118 (43.9%) were students, 36 (13.4%) were administrative workers, and 34 (12.6%) were housewives. Approximately 116 (43.1%) of the participants had a monthly income

below 7.000 SR; 74 (27.5%) did not specify their income or had no income. Six males (7.7%) consulted pharmacists, compared with 4 females (2.1%). By contrast, 13 (6.8%) females but only 3 (3.8%) males consulted a TH. Moreover, as the participant age increased, consultations of MDs became more frequent, while dependence on self-help and relative consultations decreased. The majority (69; 65.7%) of the married participants consulted an MD, whereas most (72; 72%)

of the unmarried participants preferred self-help and relative consultations (p<0.05).

A high percentage of participants without a university education preferred self-help (32; 41%), whereas the majority of individuals with a university education or higher (106; 55.5%) consulted an MD. Ten of the unemployed participants (58.8%) and 48 (40.7%) of the students

depended on self-help. However, the majority of the housewives (24; 70.5%), administrative workers (22; 61.1%) and military personnel (8; 61.5%) consulted an MD. In the group with an income lower than 3,000 SR, 36 (40%) depended on self-help compared with 43 (47.8%) who consulted an MD.

Diseases	N	Medically Trained Practitioner	Benefit	Non Medically Trained Practitioner	Benefit
Respiratory Tract Disorders	36 (13.4%)	25 (69.4%)	11 (44%)	11 (30.6%)	7 (63.6%)
Gastrointestinal Tract Disorders	21 (7.8%)	18 (85.7%)	10 (55.6%)	3 (14.3%)	1 (33.3%)
Musculo skeletal Disorders	10 (3.7%)	9 (90%)	3 (33.3%)	1 (10%)	-
Psychological Disorders	65 (24.1%)	14 (21.5%)	5 (35.7%)	51 (78.5%)	23 (45.1%)
Neurological Disorders	11 (4.1%)	6 (54.5%)	1 (16.7%)	5 (45.5%)	2 (40%)
Cardiovascular Disorders	13 (4.8%)	8 (61.5%)	4 (50%)	5 (38.5%)	1 (20%)
Endocrine Disorders	14 (5.2%)	12 (85.7%)	8 (66.7%)	2 (14.3%)	1 (50%)
Dermatological Disorders	8 (3%)	8 (100%)	6 (75%)	-	-
Urogenital Disorders	7 (2.6%)	6 (85.7%)	6 (100%)	1 (14.3%)	-
Orthopedic Disorders	5 (1.9%)	5 (100%)	3 (60%)	-	-
Obstetric and Gynecological Disorders	3 (1.1%)	-	-	3 (100%)	1 (33.3%)
Ophthalmology Disorders	1 (0.4%)	-	-	1(100%)	-
Ear, Nose and Throat Disorders	37 (13.8%)	19 (51.4%)	17 (89.5%)	18 (48.6%)	13 (72.2%)
Dental Disorders	3 (1.1%)	2 (66.7%)	1 (50%)	1(33.3%)	1 (100%)
Oncology Disorders	4 (1.5%)	4 (100%)	2 (50%)	-	-
Hematology Disorders	6 (2.2%)	4 (66.7%)	1 (25%)	2 (33.3%)	1 (50%)
Not specific disease	25 (9.3%)	13 (52%)	11 (84.6%)	12 (48%)	4 (33.3%)
Total	269	153	89	116	55
	100%	56.90%	58.20%	43.10%	47.40%

Medically Trained Practitioner: Medical Doctor and Pharmacist; Non Medically Trained Practitioner: Traditional Healers and Self-help + Relative; N: Number of Participants

**Table 2:** The health problem versus the types of health seeking services and it benefit.

Table 2 shows the diseases that participants reported and the distribution of consultations of medically and non-medically trained practitioners. Psychological disorders were reported most often (65 people; 24.1%).

The second and third most common problems reported were ear, nose and throat (ENT) and respiratory disorders, by 37 (13.8%) and 36 respondents (13.4%), respectively.

The lowest percentage was found for ophthalmology disorders, with 1 person (0.4%). Dental and oncology disorders were reported by 3 (1.1%) and 4 (1.5%) people, respectively.

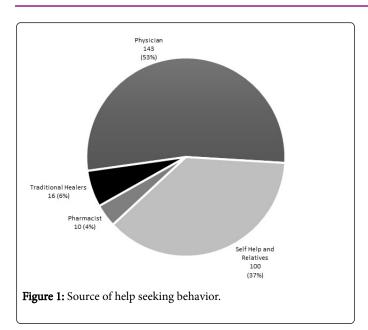
Regarding the types of health-seeking services, the majority of the participants who reported gastrointestinal (GI) disorders (18; 85.7%)

and 25 (69.4%) with respiratory tract disorders consulted a medically trained practitioner (pharmacist or MD).

However, the majority of the participants with psychological disorders (51; 78.5%) sought help from a non-medically trained practitioner.

Twenty-five participants (9.3%) had nonspecific disorders, of whom 13 (52%) consulted a medically trained practitioner. A high proportion of these participants (11; 84.6%) claimed to receive a benefit. However, only 4 (33.3%) of 12 (48%) participants who consulted a non-medically qualified practitioner noted any benefit.

Figure 1 shows the sources of HSB. Physicians were consulted most often (143; 53%) followed by self-help and relatives (100; 37%). Pharmacist and THs were consulted by only 26 (10%) participants.



The 83 (58%) participants who consulted an MD reported a perceived benefit, but 58 (40.6%) did not notice a difference. Two (1.4%) participants felt they were harmed. However, approximately half of participants who preferred self-help and relative consultations reported a benefit; the other half noted no difference. Moreover, only 26 participants consulted a TH or pharmacist. Fourteen (53.8%) participants reported no difference, and 12 (46.2%) perceived a benefit (Figure 2).

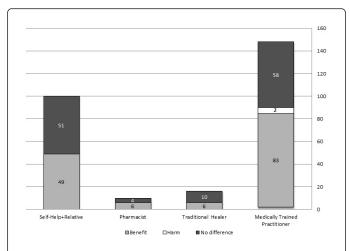


Figure 2: Source of help seeking behavior versus outcome perception.

The majority of the participants (55.6%) said they obtain health information from social media (WhatsApp, Twitter, and Facebook), followed by hospitals and health centers (54.7%). Websites and Web forums, TV and radio, and relatives and friends had similar rates of use, with 36%, 35.6% and 32.4%, respectively. Only 19.6% of participants received information via online newspapers, and 20.9% reported exposure to awareness campaigns and brochures.

The participants attributed their decision to seek help from nonprofessionals to the long delays for obtaining appointments at Ministry of Health hospital (MOH) (42.7%); the second most common reason given was difficulty accessing specialized health centers and long waiting times for medical consultations (40%). High health insurance costs also discouraged individuals from seeking advice from trained professionals (19.6%). Poorly equipped neighborhood health care centers led 17.3% of the participants to consult non-health professionals. However, easy access to pharmacists and THs were cited by 12.4% of the participants. Only 9.8% of the participants gave other reasons for seeking help from non-health professionals.

## Discussion

The most common disorders that caused participants to seek help from the various types of healthcare providers were psychiatric, ENT and respiratory disorders. Consistent with the WHO estimation that 25% of the world population suffers from mental illness, both in the developed and developing world's [15,16], approximately 24% of our participants complained of psychiatric disorders. Moreover, in Saudi Arabia, there are only 0.3 psychiatrists for every 10,000 individuals [17]. Thus, adequate professional health care is not readily available, which might contribute to the increased incidence or worsening of psychiatric disorders. ENT disorders comprised 13.8% of all complaints, which was associated with the season in which the study was conducted (winter). Furthermore, influenza-like illness epidemics occur with seasonal characteristics and marked winter peaks in most countries and regions [18]. Additionally, 13.4% of the complaints were respiratory disorders. An earlier study in Saudi Arabia showed that 18% of the subjects sought help for respiratory problems [7], which might be correlated with the dusty environment and smoking habits of the population [17]. A study in China showed that the degree of air pollution was closely associated with the number of patients with respiratory diseases [19].

Fifty-three percent of the subjects consulted an MD compared with 77% in a previous 1992 study [7]. Furthermore, it was surprising to find that the number of participants who reported self-treatment increased markedly, the previous rate was only 2%; it is now 37% [7]. The increase in self-treatment and decrease in MD consultations may be due to the increasing availability of medications without a prescription. It may reflect an increased access to knowledge through social media and the Internet. A recent report showed that the prevalence of using the Internet in Saudi Arabia rose from 5% in 2001 to approximately 55% of the population at the end of 2013 [20]. Additionally, the number of shops selling traditional therapy items has increased over the past three decades. The present study had some limitations, including that the majority of our study population was highly educated; 71% of the participants had a university education or higher. Thus, these individuals might be able to spend more on health care.

Age, marital status, play a significant role in HSB. In the present study, older participants consulted an MD more often than the younger participants. Additionally, married subjects more often consulted an MD (65.7%). As a previous study in Riyadh City showed, the majority of individuals over 45 years old consulted a medically trained practitioner (89.5%) and most of the married participants consulted a medically qualified practitioner (79.3%) [7]. However, it is common for an elderly patient to have multiple pathologies. The experience of older individuals has led them to recognize that their problems can only be solved by experts (i.e., MDs). Furthermore, family experiences led to increased consultations of medically qualified practitioners in antenatal and pediatric clinics by wives and children.

The primary source of health information for the participants was social media (55.6%). Earlier studies have shown that social media has a significant effect on promoting patient knowledge. Furthermore, obtaining health information helps patients overcome multiple barriers [21-23]. This platform opens an avenue for health decision makers to promote health.

The majority of the subjects reported benefits from seeking help from an MD. Moreover, 25 participants had vague symptoms, and they benefited from consulting medically (84.6%) and non-medically trained practitioners (33.3%). Medically trained practitioners are respected health care professionals who have at least six years of training. Therefore, they are trusted by the public, unlike nonprofessionals.

The reasons that people visited non-medically trained practitioners instead of MDs included lack of time and difficulty accessing specialized healthcare centers. Our results showed that health coverage by clinical services and the number of hospital beds was inadequate, which is recognized by the decision makers in the Kingdom of Saudi Arabia (KSA). WHO reports have cited 21 beds locally and 27 beds globally per 10,000 individuals, which illustrates the need for more hospitals and primary health care (PHC) centers [17]. Thus, the MOH plans to build vast medical complexes throughout the Kingdom to increase coverage. Furthermore, the MOH has adopted a new method to manage cases (i.e., one-day surgery), which has increased the bed turnover rate to approximately 4 per month [24]. In 2013, Riyadh City had 482 hospitals and PHC centers, an increase of 16.8% since 2006

#### Conclusion/Recommendations

Based on the present study, approximately half of individuals seek non-medical help despite having a condition that requires medical help. Therefore, the HSB in the Saudi community is still in need of improvement. Because the use of the Internet has become common among the public, dependence on self-help treatment has increased. We hope this study will motivate researchers to examine different HSBs and their effects, such as the influence of the Internet on selfcare. Furthermore, studies are needed to investigate participant claims of difficulty in accessing health care centers and coverage, the safety of THs, and the use of social media for rationalizing HSB.

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