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A cross-sectional study on healthcare seeking behavior among Saudi women in Riyadh

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Many researchers have attempted to investigate the relationship between individuals and healthcare utilization; however, there is a lack of adequate studies examining the factors influencing healthcareseeking behavior among Saudi Arabian women. Therefore, this study aimed to explore the barriers that influence healthcare-seeking behavior among Saudi women in Riyadh city, Saudi Arabia. This crosssectional study was conducted with 511 Saudi women during October and November of 2022. Ethical approval was obtained from the Research Ethics Committee of King Saud University, Saudi Arabia. Participants completed self-administered online surveys regarding their demographic characteristics, healthcare-seeking behavior, and barriers to seeking healthcare. To analyze the relationship between healthcare-seeking behavior, barriers to healthcare, and independent variables, data were analyzed using SPSS version 23 with descriptive statistics and correlation. The majority of participants were aged 31-40 years. Analysis of the responses to the Barriers to Seeking Healthcare Scale revealed an overall mean score of 14.37 out of 20 (SD = 2.3), indicating that barriers to seeking healthcare significantly impacted the participants. Key findings revealed a statistically significant relationship between occupation (specifically full-time workers) and barriers to seeking healthcare (p = 0.003), suggesting that full-time female workers perceive more barriers to healthcare access. Most participants identified the lack of available appointments and difficulty obtaining required healthcare as significant barriers. Understanding Saudi women's healthcare-seeking behavior and its determinants is crucial for identifying these barriers and improving women's health outcomes. This study confirms the various challenges Saudi women face in seeking healthcare. The conclusion proposes new research directions and strategies to address these challenges. It is important to emphasize that further research is needed to capture the broader cultural and social factors at play. A comprehensive policy intervention is recommended, focusing on recognizing and addressing women's healthcare needs in light of current efforts to reduce these barriers.

Keywords Healthcare, Seeking behavior, Saudi Arabia, Women's health, Barriers

Healthcare-seeking behavior (HSB) is defined as "people's behaviors aimed at improving their health and finding an appropriate remedy through the use of medical services¹. "Understanding HSB is crucial for improving access to and utilization of healthcare services, as delays in seeking care can worsen health outcomes and increase treatment costs². In Saudi Arabia, delayed healthcare among women heightens the risk of chronic conditions such as cardiovascular disease and diabetes, leading to severe complications and costly treatments^{3,4}. A study on hypertension and diabetes in Saudi Arabia, which included women, revealed that many cases remain undiagnosed or untreated due to delays in seeking care⁵. Improving healthcare access and implementing early detection programs for women are essential to reducing long-term health risks and alleviating the strain on the healthcare system.

Research in Saudi Arabia has explored adult health-seeking behavior, revealing important insights into gender differences. A study of 481 participants in Ahsa, Saudi Arabia, found that 80% of females seek medical attention when experiencing health symptoms, compared to 62% of males⁶. Another cross-sectional study of 446 Saudi participants found that 79% self-medicated, while only 21% consulted a specialist. Additionally, 90.5% of mothers sought medical attention for their sick children under the age of two⁷. A larger study involving 1,408 individuals in Saudi Arabia found that 76% of women under the age of 45 sought help from a medical professional, while 4.5% consulted pharmacies, 17.3% visited traditional healers, and 2.2% relied on self-treatment⁸. Furthermore, the majority of traditional healers' clients were women over the age of 60, married or divorced, and uneducated.

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These studies suggest that many women either lack awareness of available treatments or do not perceive their health issues as serious enough to warrant professional care^{6,9}. Several studies have shown that the prevalence of self-medication among Saudi women varies from moderate to high, especially during pregnancy^{7,10}.

Several factors influence women's healthcare-seeking behavior, including age, education, sociocultural norms, the type of illness, access to services, and perceived service quality^{11,12}. Stigma has been identified as a significant barrier to seeking mental healthcare among Saudi women, followed by cultural norms and negative perceptions of healthcare services¹³.

In many societies, women face challenges rooted in sociocultural factors, such as unequal power relationships between men and women, social norms that limit education, and an exclusive focus on women's reproductive roles¹⁴. For example, a 2020 survey investigating healthcare-seeking behavior among rural women in Telangana, India, revealed that nearly half of the women needed permission from family members to access health services, and only one-third sought medical care as soon as symptoms appeared¹⁵. A qualitative study involving 66 Saudi women examined how gendered social structures influence their health compared to men's. Most participants perceived their health as poor, attributing it to responsibilities such as childbearing, caregiving, psychological stress, and marital conflicts¹⁶. Rural women in southern Saudi Arabia faced additional challenges in accessing healthcare and engaging in physical activity due to cultural barriers, a shortage of medical professionals, transportation difficulties, and inadequate healthcare services¹⁷.

Addressing these barriers requires targeted interventions to improve healthcare accessibility and utilization. One effective approach is the implementation of health education programs, which can enhance women's awareness of healthcare services and empower them to make informed health decisions¹⁸. Increasing knowledge about available healthcare facilities and the importance of timely medical care can help women overcome obstacles to seeking treatment. However, limited access to healthcare centers remains a significant challenge, often leading individuals to seek unqualified assistance or rely on self-treatment¹⁹. Healthcare professionals play a crucial role in addressing these issues by identifying barriers to care and implementing preventive measures, ultimately improving health outcomes for women.

Despite existing research on healthcare-seeking behavior, no studies in Saudi Arabia have specifically explored barriers affecting women in Riyadh. This study addresses this gap by identifying key challenges hindering healthcare access for Saudi women, aiming to inform policymakers, providers, and families. The findings seek to guide targeted interventions to improve healthcare utilization and health outcomes for this population.

Materials and methods Study design

The study was a descriptive cross-sectional study conducted using online social platforms (WhatsApp, Twitter, Telegram, and Instagram) to assess barriers influencing healthcare seeking behavior among Saudi women aged 18 and above. Participants in the study were recruited using a survey powered by Qualtrics software. A survey link or Quick response (QR) code was sent through social media.

Study population and sample

The current population of Saudi Arabia is 31 million people, with 13 million (44.8%) Saudi Arabian women living in Saudi Arabia²⁰. A sample chosen at a confidence level of 95% was calculated using an online sample size calculator (Raosoft Sample Size Calculator) and found to be 385 participants. The study participants consisted of 511 Saudi Arabian women ages 18 years and above living in the city of Riyadh, Saudi Arabia.

Study tool

This study used a structured questionnaire as its primary data collection tool to assess barriers influencing healthcare seeking behavior among Saudi women. The questionnaire was based on a previously validated instrument^{19,21}. The questionnaire was in Arabic for easy completion by the general public.

The questionnaire has five main sections

Section One: Personal Information: This section collects demographic data about the study sample, including age, educational level, occupation, household monthly income, and marital status.

Section Two: Health Insurance Information: This section gathers information regarding the type of healthcare coverage, coverage plan, out-of-pocket payments, and type of healthcare facility used.

Section Three: This section focuses on healthcare seeking behavior, including the type of chronic diseases, symptoms of diseases, evaluation of health status, healthcare facility visits, and reasons.

Section Four: This section seeks to capture data on barriers to seeking healthcare by evaluating the impact of a variety of items on decision making in seeking healthcare, such as the availability of appointments and needed services.

Section Five: Informal Healthcare Practices Section includes information regarding alternative healthcare, self-medication, or traditional/home remedies.

A pilot study was conducted before the main study to test the questionnaire. The pilot study included 15 Saudi women from Riyadh, Saudi Arabia. The female participants align with the study's population definition. The pilot study's primary goal was to gather additional feedback on the time required to complete the questionnaire, the clarity of the questions, and the logical arrangement.

Ethical consideration

This study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki for medical research involving human subjects. Ethical approval was obtained from the Research Ethics Committee of King Saud University, Saudi Arabia (IRB Project No. E-22_7167). All procedures followed the relevant

ethical guidelines and regulations to ensure the protection of participants. Before participating in the online survey, eligible participants were provided with detailed information about the study's purpose, procedures, and voluntary participation. Informed consent was obtained electronically, where participants confirmed that they understood the study and agreed to participate. They were also informed that they could skip any questions or withdraw from the survey at any time without any consequences.

Data collection

An online survey was used to collect data, which was then distributed using a non-probability sample selection through social media with the required inclusion criteria. The sample selection criteria included Saudi Arabian women. In addition, participants had to be at least 18 years old, live in Riyadh city, and be able to read Arabic. The data were collected during the months of October and November 2022. A total of 631 Saudi women responded to the online survey. The study excluded 120 participants with incomplete responses, resulting in a sample size of 511 for analysis.

Statistical analysis

The data were analyzed using SPSS version 23. Descriptive statistics were applied to summarize the sample's characteristics and key variables. A normality test was conducted to determine if the data met the assumptions necessary for parametric analyses. The Kolmogorov-Smirnov test was used to assess the normality of both the dependent variable (barriers to seeking healthcare) and the independent variables (demographic variables). The results revealed that the data was not normally distributed (p < 0.05). As a result, non-parametric tests were utilized for further analysis. The Kruskal–Wallis test was conducted to investigate differences in the level of challenges preventing individuals from seeking healthcare, based on demographic variables. In addition, a Chisquare test was performed to examine the relationships between categorical variables. A significance level of p < 0.05 was considered statistically significant.

Results

Demographic data of the study participants

Demographic characteristics of the study participants (n = 511) are presented in Table 1. The participants were all Saudi women aged 18 to 65 living in Riyadh, Saudi Arabia. As shown in Table 1, many of the participants were between the ages of 31 and 40, with a low percentage older than 60 years. Among the participants, 70% were married and 24% were single. The majority of the study participants (64%) had a bachelor's degree, and a smaller proportion of the sample had an educational level below high school. More than half of the study participants (54%) were full-time workers, while a low percentage of the sample were part-time workers. Furthermore, 27% of employed respondents work in the public sector, with 11% working in the semipublic sector. Most participants reported a monthly household income ranging from 11,000 to 20,000 RS.

Health insurance information

In the response to the question "What type of healthcare coverage do you currently have, approximately half of all participants reported having private insurance, while the majority of them had a partially covered plan. The findings revealed that 43% of participants paid out of pocket for healthcare three or more times in the previous year, 33% paid out of pocket for healthcare one to three times, and a small percentage did not pay out of pocket for healthcare. Concerning the question "What type of healthcare facility did you visit?", half of the participants reported visiting a private hospital, while only a small percentage visited a private medical city.

Healthcare seeking behavior

The majority of the participants in this sample have no chronic diseases, and approximately half of them evaluated their health as good [Table 2 for more details]. Most of the respondents (85%) indicated that they seek healthcare if their symptoms or issues worsen and 3% do not seek medical attention when new symptoms or problems arise. In addition, 42% of participants reported visiting a healthcare facility last month, compared to 9% last year. Responses given by the participants in this study showed that the most common reason for visiting a healthcare facility was an emergency room (ER) visit. Fatigue was the most common symptom that made participants seek healthcare.

Barriers to seeking healthcare

In this study, barriers to seeking health care were examined, including the target population's perceptions of identifying challenges obtaining health care services. The Barriers to Seeking Healthcare Scale included four items (e.g., "Difficulty in reaching required healthcare"). The item response options are based on a Likert scale with five ordered response levels (1 = very ineffective to 5 = very effective). To assess the average scores, the arithmetic means of the participants' responses were calculated. Given that the scoring scale is out of 20, the impact of the barriers was categorized into three levels: low, medium, and high. The scores were divided into three equal ranges as follows: Low: 1.00-6.67, Medium: 6.68-13.33, and High: 13.34-20.00. Higher composite scores on the overall scale indicated greater difficulties in seeking health care. After analyzing the responses, the overall mean score was 14.37 out of 20 (SD=2.3), indicating that the impact of barriers to seeking healthcare was significant.

"No available appointments" constitute the leading barrier (42%) to seeking health care, followed by 'difficulty in reaching required healthcare" (38%), "lack of trust in health care providers" (17%), "Fear of diagnosis", however, were the least factors to be a barrier (3%).

	Frequency	Percent			
Marital status		l			
Divorced	24	5			
Married	359	70			
Single	122	24			
Widower	6	1			
Age		1			
18–30 years old	143	28			
31-40 years old	152	30			
41-50 years old	98	19			
51-60 years old	89	17			
More than 60 years old	29	6			
Level of education					
Elementary	4	1			
Middle school	6	1			
High school	56	11			
Bachelors	329	64			
Graduate studies	80	16			
Other diploma	36	7			
Occupation					
Student	38	7			
Unemployed	114	22			
Full time worker	277	54			
Part time worker	15	3			
Retired	67	13			
If you are employed in which sector do you work at?					
Public sector	137	27			
Private sector	99	19			
Semipublic sector	56	11			
Household monthly income					
Below 10.000 SR	117	23			
11,000-20,000	212	41			
21,000-30,000	96	19			
31,0000-40,000	45	9			
41,000 and above	41	8			

Table 1. Sociodemographic characteristics of the study population (n = 511), n = %.

Informal healthcare practices

As shown in Table 3, most of the participants have tried one of the following alternative healthcare: self-medication or traditional/home remedies, and among those, the majority of them used self-medication sometimes. [See Table 3 for more details].

Correlation analysis

Chi-square tests were used to determine the level of significance and association between healthcare seeking behavior and specific independent variables. There was no significant difference in the type of healthcare coverage and seeking healthcare when new symptoms or issues appeared (p=0.453). This suggests that the type of healthcare coverage did not affect seeking care when new symptoms or issues appeared. There was no statistically significant relationship between trying alternative health care services and seeking healthcare when new symptoms or issues appeared (p=0.221). This suggests that trying alternative health care services had no effect on seeking medical attention when new symptoms or issues arose.

Barriers to Seeking Healthcare in Relation to Independent Variables.

The study used the Kruskal–Wallis test to examine differences in perceptions of barriers to seeking healthcare among various demographic groups, with a statistical significance level set at $p \le 0.05$. The key findings are summarized below:

1. *Educational Level*: No statistically significant differences were found in perceptions of healthcare barriers based on education level (p = 0.12). This suggests that individuals across different educational backgrounds (e.g., primary, secondary, and higher education) face similar challenges in accessing healthcare.

Characteristics		Frequency	Percent
Da von hans ann shuania diassa?	Yes	145	28
Do you have any chronic disease?	No	366	72
	Diabetes	74	51
	Heart diseases	8	6
to the last of the last of	Respiratory diseases	18	12
If you answered with yes, what type of chronic disease do you have?	Physical disability	2	2
	Depression, bipolar, or any other mental disease	7	5
	Other	36	24
	Poor	5	1
	Acceptable	20	4
Generally, how would you evaluate your health?	Good	250	49
	Great	236	46
	Immediately	63	12
When a new symptoms or issue appear, you seek healthcare	When symptoms worsen	433	85
	You don't seek healthcare	15	3
	In the Last month	213	42
	In the Last 3 months	119	23
For yourself when was the last time you visited a healthcare facility?	In the Last 6 months	72	14
	In the Last year	46	9
	Over a year ago	61	12
	ER visit	242	47
	Follow up visit	230	45
	ER visit and Follow up visit	8	2
What was the reason for your last visit?	ER visit and New issue	8	2
	Follow up visit and new issue	19	3
	ER visit and Follow up visit and New issue	4	1
	Fatigue	275	54
	Rash	27	5
The second secon	Fever	89	17
The main symptom that made you seek healthcare	Nausea or vomiting	43	8
	Cough	54	11
	Other	23	5

Table 2. Healthcare seeking behavior characteristics (n = 511), n = %.

Characteristics			Percent
Have you ever tried one of the following alternative healthcare; self-medication or traditional/home remedies?	Yes	338	66
	No	122	24
	I can't recall	51	10
If you have tried any alternative healthcare; please choose your preference from the following:	Self-medication	146	29
	Traditional/home remedies	81	16
	Self-medication and traditional/home remedies	98	19
	Other	13	2
If you choose self-medication, please choose to what extent do you follow this practice?	Rarely	67	13
	Sometimes	191	37
	N=Mostly	80	16
If you choose traditional/home remedies, please choose to what extent do you follow this practice?	Rarely	53	10
	Sometimes	126	25
	Mostly	38	7

Table 3. Informal healthcare practices (n = 511), n = %.

Dimensions	Occupation	Number	Mean Ranks	Chi-Square	Degrees of Freedom	Significance Level
Barriers to healthcare seeking	Unemployed	114	32.25	0.209	4	0.003*
	Full-time worker	277	96.00			
	Part-time worker	15	43.46			
	Retired	67	32.14			
	Student	38	29.15			

Table 4. Kruskal–Wallis test results for differences in barriers to Healthcare-Seeking by occupation (n = 511). *Statistical significance level set at $p \le 0.05$.

- Occupation: A significant relationship was observed between occupation and perceived barriers to seeking
 healthcare (p = 0.003). Full-time female workers reported greater challenges in seeking healthcare compared
 to their non-working or part-time counterparts, possibly due to time constraints and work-related commitments. [See Table 4 for more details].
- 3. Work Sector: No significant differences were found between work sectors (public, private, or semi-public) in relation to perceived healthcare barriers (p = 0.18). This indicates that the nature of employment does not play a substantial role in influencing healthcare seeking behavior.

Discussion

The primary goal of this study was to investigate the barriers influencing healthcare-seeking behavior among Saudi women in Riyadh. The findings demonstrated that several barriers have a significant impact on healthcare-seeking behavior in this group. In particular, the results indicated that "no available appointments" represent the leading barrier to seeking health care, followed by "difficulty in reaching required healthcare," "lack of trust in health care providers," and "fear of diagnosis." These findings align with previous studies, which have also identified appointment availability and accessibility as significant challenges^{22,23}. However, in this study, the lack of available appointments may reflect the limited availability of female physicians, while difficulty in accessing healthcare could be linked to the need to seek permission from family members or to be accompanied by someone to reach healthcare facilities.

The study further highlighted the substantial impact of barriers to healthcare access, demonstrating that participants encountered notable challenges in obtaining medical services. These obstacles likely influenced behaviors such as opting for emergency room visits over primary care, postponing medical consultations until symptoms became severe, and resorting to self-medication or traditional/home remedies instead of seeking professional healthcare. These behaviors highlight the need for systemic changes to improve healthcare access and utilization among Saudi women.

The findings also reported a statistically significant association between occupation (full-time workers) and barriers to seeking healthcare. Full-time working women reported greater challenges in accessing healthcare, likely due to time constraints and the difficulty of balancing work and family responsibilities. This underscores the need for flexible healthcare services, such as extended clinic hours or workplace health initiatives, to accommodate the needs of working women.

Clinics deliver the majority of modern healthcare services nationwide but often struggle with issues like long wait times and limited appointment availability⁵. However, community-based initiatives play a crucial role in enhancing healthcare accessibility for women, especially those who encounter difficulties in accessing medical facilities. These programs would not only improve accessibility but also cater to cultural preferences, such as the need for female healthcare providers. Moreover, increasing the emphasis on technology for healthcare delivery through telemedicine or mobile health platforms may help overcome some of the identified barriers. These technological solutions would provide healthcare services to women who are unable to reach healthcare providers due to geographical constraints or who prefer female healthcare providers. By improving the convenience and accessibility of healthcare services, technology could serve as a powerful tool in bridging gaps in care for women in Saudi Arabia.

Over half of the participants in this study were employed full-time and had private insurance with partial coverage. This aligns with the fact that half of the respondents chose "a private hospital" as their preferred healthcare facility. This finding is also consistent with the results of the World Health Survey (KSAWHS) conducted by the Saudi Ministry of Health (MOH) in 2019, which focused on healthcare utilization and system responsiveness²⁴. The survey indicated that most participants' recent interactions with the healthcare system were with private specialists/consultants and private dental services. Additionally, while public healthcare services are more commonly sought nationwide, Riyadh region has the highest proportion of individuals seeking private healthcare. Similarly, a report on Hong Kong's voluntary health insurance scheme revealed that the private sector provides about 70% of outpatient services²⁵. The study also found that nearly half of the participants visited hospitals as their first point of contact with healthcare, rather than primary or polyclinics, a finding that mirrors a study conducted in South Iran, where 43% of participants went directly to hospitals²⁶.

The study also found that many Saudi women engaged in self-medication or used traditional/home remedies, likely influenced by cultural factors that emphasize the use of natural products. This aligns with previous research indicating that many Saudi women prefer self-medication and often seek advice from family and friends rather than consulting healthcare professionals⁷. This behavior may be exacerbated by challenges in accessing formal healthcare or the perception that the healthcare system is inefficient.

This study underscores the importance of conducting qualitative research to gain deeper insights into the cultural and social factors influencing Saudi women's healthcare-seeking behavior. In-depth interviews and focus group discussions could reveal societal norms, familial expectations, and cultural beliefs that act as barriers to healthcare access¹³. For example, understanding the role of modesty, gender-specific preferences for healthcare providers, and family decision-making dynamics could provide valuable context for developing targeted interventions. Combining quantitative and qualitative approaches would offer a more comprehensive understanding of the multifaceted barriers faced by Saudi women.

A concerning delay in seeking healthcare was observed, with 84% of participants reporting that they waited until symptoms worsened before seeking treatment. This finding mirrors the Saudi Ministry of Health's report, where 66% of respondents did not seek healthcare because they did not feel sick enough²⁴. This behavior is further reflected in the participants' preference for visiting emergency rooms, as they often delay seeking care until their symptoms become severe and require urgent attention. Such delays are often due to perceptions of barriers to healthcare access, which may lead to worsened health outcomes.

The healthcare-seeking behavior of the sample may elevate the risk of chronic diseases due to delays in seeking medical care. It is crucial to raise awareness about the risks of chronic diseases and the importance of preventive healthcare. Educating women on the benefits of early screening, detection, and preventive measures can help reduce health risks. This study can inform future educational efforts aimed at encouraging earlier engagement with healthcare services, particularly to prevent chronic conditions. Moreover, healthcare providers should enhance awareness campaigns to highlight the negative effects of postponing healthcare.

This study adds to the existing body of literature by reaffirming the ongoing barriers to healthcare access for Saudi women. Overcoming challenges such as appointment availability, difficulty in accessing care, and cultural preferences requires a comprehensive strategy. Policymakers should focus on increasing the availability of appointments, especially for female healthcare providers, and invest in community-based outreach programs to improve healthcare access. This study offers valuable insights for healthcare institutions and professionals, serving as a foundation for future research that can further explore the link between barriers and healthcare-seeking behaviors among Saudi women. It contributes to the existing literature by reaffirming the persistent obstacles to healthcare access for this group. Addressing challenges such as appointment availability, access difficulties, and cultural preferences requires a comprehensive strategy. This research can inform the development of more effective healthcare strategies that are tailored to meet the unique needs of women in Saudi Arabia. Policymakers should prioritize increasing appointment availability, particularly with female healthcare providers, and invest in community-based outreach initiatives to enhance healthcare access.

Limitations.

This study has some limitations. One potential limitation of the study is recalling bias, which requires respondents to recall when, where, and why they sought health care. The current study only includes women from one region of Saudi Arabia (Riyadh). This study used a broader definition of health care seeking behavior, which may not be comparable to health care seeking behavior for specific disease. The results were interpreted as associations rather than causations, acknowledging that selection into barriers could be due to other specific factors, such as culture, that are not visible to a researcher. The inherent limitations of convenience sampling are acknowledged, which can overrepresent groups with higher levels of social media engagement or larger online networks. This may skew the sample towards younger, more digitally active individuals, limiting the generalizability of the findings, particularly for older women. However, the age distribution in the study is consistent with patterns of social media usage in Saudi Arabia, where younger generations are more active on these platforms.

Conclusion

This study revealed significant barriers to healthcare-seeking behavior among Saudi women in Riyadh, including difficulties accessing appointments, delays in seeking care, and reliance on self-medication or traditional remedies. A key finding is the association between full-time employment and a greater perception of these barriers, highlighting the challenges faced by working women in accessing healthcare. The study underscores the importance of addressing these barriers to improve healthcare utilization. Collaboration between healthcare providers and various organizations is crucial in understanding and alleviating the challenges that women face. Furthermore, raising awareness about the importance of timely healthcare and prevention could significantly improve healthcare-seeking behavior. It is important to emphasize that further research is needed to capture the broader cultural and social factors at play. Qualitative research would significantly enhance our understanding of these influences, offering a deeper perspective on how personal, familial, and societal norms shape healthcare decisions.

Data availability

The data generated and analyzed in the current study are available from the corresponding author upon request.

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References

- Latunji, O. O. & Akinyemi, O. O. Factors influencing health-seeking behaviour among civil servants in Ibadan, Nigeria. Ann. Ib. Postgrad. Med. 16, 52–60 (2018).
- 2. Giridhar, G. et al. Older women in India: Economic, Social and Health concerns, awareness, access and quality of elderly services thematic paper 2 (2015).

- AlQuaiz, A. M. et al. Women health in Saudi Arabia: A review of non-communicable diseases and their risk factors. Pakistan J. Med. Sci. 30 (2), 422 (2014).
- Bcheraoui, E. et al. Access and barriers to healthcare in the Kingdom of Saudi Arabia, 2013: Findings from a National multistage survey. BMJ Open. 5, e007801. https://doi.org/10.1136/bmjopen-2015-007801 (2015).
- 5. Almalki, M., Fitzgerald, G. & Fitzgerald, M. Health care system in Saudi Arabia: An overview. East. Mediterr. Health J. 17 (10), 784–793. https://doi.org/10.26719/2011.17.10.784 (2011).
- 5. Almaqhawi, A. et al. Patient's Perspective on Factors Affecting Health-Seeking Behavior in Al-Ahsa, Saudi Arabia. *Cureus* 14 (10), e30078 (2022).
- Al-Nahedh, N. Sociodemographic variables affecting the health seeking behaviour of mothers in a Saudi community. J. Family Commun. Med. 11, 3–9 (2004).
- 8. Al-Rawais, N. et al. Traditional healers in Riyadh region: reasons and health problems for seeking their advice. A household survey. J. Altern. Complement. Med. (New York N Y) 16 (2), 199–204. https://doi.org/10.1089/acm.2009.0283 (2016).
- 9. Norton, C. & Dibley, L. Help-seeking for fecal incontinence in people with inflammatory bowel disease. *J. Wound Ostomy Cont. Nurs.* 40, 631–638 (2013).
- Ebrahimi, H. et al. Self-medication and its risk factors among women before and during pregnancy. Pan Afr. Med. J. 7 (27), 183. https://doi.org/10.11604/pamj.2017.27.183.10030 (2017).
- 11. Carrillo, J. E. et al. Defining and targeting health care access barriers. J. Health Care Poor Underserved 22, 562–575. https://doi.org/10.1353/hpu.2011.003 (2011).
- 12. Taber, J. M. et al. Why do people avoid medical care? A qualitative study using National data. J. Gen. Intern. Med. 30 (3), 290–297. https://doi.org/10.1007/s11606-014-3089-1 (2015).
- 13. Alissa, N. A. Social barriers as a challenge in seeking mental health among Saudi Arabians. *J. Educ. Health Promot* 10, 143. https://doi.org/10.4103/jehp.jehp_819_20 (2021).
- 14. Alissa, N. A. Cultural challenges to weight management: A qualitative study of Saudi women's wxperiences. *J Commun. Health Nurs.* 39 (1), 12–24. https://doi.org/10.1080/07370016.2022.2028062 (2022).
- Reddy, P. M. C., Rineetha, T., Sreeharshika, D. & Jothula, K. Y. Health care seeking behaviour among rural women in Telangana: A cross sectional study. *J. Family Med. Prim. Care* 30 (9), 4778–4783 (2020).
- Alyaemni, A., Theobald, S., Faragher, B., Jehan, K. & Tolhurst, R. Gender inequities in health: An exploratory qualitative study of Saudi women's perceptions. Women Health 53 (7), 741–759. https://doi.org/10.1080/03630242.2013.829169 (2013).
- 17. Dhaher, E. A. Access to reproductive health care services for women in the Southern region of Saudi Arabia. Womens Reprod. Health 4 (2), 126–140. https://doi.org/10.1080/23293691.2017.132625 (2017).
- Dawood, O. et al. Assessment of health seeking behaviour and self-medication among general public in the state of Penang. Malaysia Pharm. Pract. 15 (3), 991 (2017).
- Alshammari, S. A. et al., Help-seeking behavior among adults in Riyadh, Saudi Arabia: A cross-sectional study. Altern. Integr. Med. 5 212. https://doi.org/10.4172/2327-5162.1000212 (2016).
- 20. General Authority for Statistics in Kingdom of Saudi Arabia, Statistical Information. Population Statistics. (2016).
- 21. Gabrani, J. et al. Health seeking behavior among adults and elderly with chronic health Condition(s) in Albania. Front. Public. Health 9 https://doi.org/10.3389/fpubh.2021.616014 (2021).
- 22. Gill, J. M. & Riely, A. W. Nonurgent use of hospital emergency departments: Urgency from the patient's perspective. *J. Fam. Pract.* 42 (5), 491–496 (1996).
- 23. Weinick, R. M. et al. Many emergency department visits could be managed at urgent care centers and retail clinics. *Health Aff.* 29 (9), 1630–1636. https://doi.org/10.1377/hlthaff.2009.0748 (2010).
- 24. MOH. Health Care Utilization and System Responsiveness. In Ministry of Health (MOH Saudi Arabia, 2021).
- 25. Veronika, S. Healthcare service in Hong Kong and its challenges. China Perspective 51-58, (2016).
- 26. Moosavi, A. et al. Evidence-based medicine among health-care workers in hospitals in Iran: A nationwide survey. *J. Educ. Health Promot.* 9, 365. https://doi.org/10.4103/jehp_jehp_335_20 (2020).

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Author contributions

The author confirms sole responsibility for the following: study conception anddesign, data collection, analysis and interpretation of results, and manuscriptpreparation.

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Declarations

Competing interests

The authors declare no competing interests.

Ethical approval

For this study was obtained from the Research Ethics Committee of King Saud University, Saudi Arabia. IRB Project No. E-22_7167. Participants were informed about the purpose of the study before they filled out the questionnaire and provided informed consent.

Additional information

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