

# Awareness and utilization of urgent care services among patients attending Al-Wazarat PHCC in Riyadh, Saudi Arabia 2020

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## ABSTRACT

**Background:** Urgent Care Clinics (UCCs) offer unscheduled appointments with a “treat and release” length of visits not exceeding 60 min. The growth of clinics is dictated by patients’ demand for quality care that is unscheduled, expedited, and ubiquitous, making them accessible and available. **Objectives:** This study aimed to assess the patient’s level of awareness and utilization pattern of UCCs in Wazarat Health Care Center (WHCC) and assess factors associated with them. **Aim:** This study aims to provide information contributing to the support of decision-makers about the level of awareness among patients on urgent care services and their pattern of use within primary health care. **Methods:** This cross-sectional study included 288 patients visiting PHC clinics to measure their level of awareness and pattern of utilization using a self-administered questionnaire. **Results:** A total of 288 patients participated, 55.99% were females, and the highest percentage was in the age group of 18-38 years at 60.07%. Only one quarter, 73 (25.35%) of the patients were aware of the term urgent clinics, from them, more than a half (53.42%) visited such clinics 1-3 times in the three months before the time of study conduction, and the main cause of the visits was the common cold (25.76%). Less than half of the participants reported visiting the primary clinics without booking an appointment in advance at 44.79%. The reason for this was mainly because of having difficulty booking appointments at 54.55%. Awareness level was the highest (28.32%) among the lowest age group (18-38 years) and decreased gradually by increasing the age. A significantly higher percentage of low educational level participants reported visiting primary clinics without booking an appointment in advance at 51.33% vs. 37.68% of the university and above participants. According to patients’ income, there was a significant (0.023) difference in the awareness level; the highest was among participants with an income of 6000-12000 SAR at 32.86%. **Conclusion:** Only one-quarter of the studied patients know about the UCCs. More than half of the patients reported visiting these clinics because of difficulties in booking an appointment at the primary healthcare centers and convenience with the services provided at the UCCs. The common cold was the main reason for visiting the UCCs.

**Keywords:** Awareness, primary healthcare centers, urgent care clinics, utilization

## Introduction

Urgent care clinics are defined as “the provision of immediate medical service offering outpatient care for the treatment of acute illness and injury” by the American Academy of Urgent Care Medicine (AAUCM).<sup>[1,2]</sup> This type of service, in general, provides fast and reliable medical attention without a

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previously scheduled appointment to a variety of diseases and injuries which are not severe enough that require Emergency department visit.<sup>[2]</sup> To understand the difference between primary care and urgent care, the American Academy of family physician defined primary care as “The provision of integrated, accessible health care services by physicians and their health care teams who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community”.<sup>[3]</sup> Providing such a comprehensive approach for every patient requires effort and time, leading to extended waiting hours with inconvenient working time and schedules to both physicians and patients.<sup>[4]</sup> Primary care physicians are trained to treat acute and chronic illness with no limit to a specific disease through a holistic patient-centered approach and in connection with every other medical specialty. Understanding this kind of role, we can see that it is vital for urgent care clinics to be managed by Primary care physicians.<sup>[2,3]</sup>

Due to the continuous increase in patients’ numbers, the utilization of emergency departments (EDs) has been increased in many countries, including Saudi Arabia.<sup>[5,6]</sup> Previous global studies from United States (US), Canada, Australia, and United Kingdom showed that demand for EDs care is increasing by as much as 3% to 6% each year.<sup>[7-10]</sup> Emergency and urgent care are witnessing increased demand which has its impact as well known and includes ED crowding, cost increments, prolonged waiting times, and overstretched services. ED crowding has been an identified problem in the US since the mid-1980s,<sup>[9]</sup> occurs in most developed countries,<sup>[11-14]</sup> and is described as a worldwide public health problem.<sup>[15]</sup> As per the literature, some of the increase in demand is attributable to patients with primary care problems who use emergency and urgent care settings to reach care,<sup>[16]</sup> despite that large proportions of those patients (10%–60%) can be managed using lower-acuity-care services.<sup>[17]</sup>

Urgent Care Clinics (UCCs) provide unarranged appointments with a “treat and release” patients visit not exceeding 1 hour.<sup>[18]</sup> Furthermore, the future of clinics is pressurized by patients’ need for better, speedy, reliable, and easy access to health care.<sup>[19-21]</sup> It is important to understand why patients make decisions that are judged clinically unnecessary as this might inform interventions to decrease requests for overloaded health services. Though it should be noted that patient behavior is only one part of the picture, and the concept of clinically unnecessary use of health services is argumentative.<sup>[22,23]</sup>

A recent review of different studies mainly from the United States and the United Kingdom identified the main reasons for attendance at emergency and urgent care clinics, including a lack of access to primary care; perceptions of urgency or anxiety; recommendations from friends, family, or healthcare professionals; and convenience in terms of better opening hours or being located closer to home than alternatives.<sup>[24]</sup>

There is a lack of data about patient’s knowledge about UCC and their scope of practice in Saudi Arabia. Davis and Meyer<sup>[25]</sup> recommended that involving patients and increasing awareness may lead to favorable emergency medicine utilization. Thus, it is relevant to assess the patients’ awareness in Saudi Arabia whether by campaigns to enhance the “patient-physician relationship” or understanding patients’ expectations of the duty provided by emergency medicine or urgent care physicians to reflect for the utmost benefit of resources and better utilization. Therefore, in the current study, we aimed to assess the patient’s awareness and utilization pattern of UCCs in Saudi Arabia and assess factors associated with them.

## Methodology

**Study Design:** This is a descriptive Cross-sectional Study of the Awareness and utilization of Urgent Care services among patients attending Wazarat Health Center (WHC).

**Study Setting:** General family medicine, chronic diseases, and urgent care clinics in WHC in Riyadh city, which is considered one of the largest primary health care centers in the middle east with more than 30 clinics and different specialty clinics, affiliated to Prince Sultan Medical and Military City (PSMMC).

**Target Population:** All adults who had the chance to visit WHC during this study fulfilled the inclusion criteria and were willing to participate.

**Sampling Technique:** A self-administered questionnaire using convenience sampling for those visiting WHC.

**Inclusion Criteria:** Adult patient age more than 18 years who speaks and read Arabic and visits the previously selected clinics.

**Exclusion Criteria:**

Workers among the facility.

**Sample Size:**

Sample Size equal to 281 participants. It was calculated using a qualitative one proportion Equation. The proportion was taken from a similar study done by Rudd *et al.*<sup>[26]</sup> in 2016 that showed that 24% of the visits were non-urgent (14). The Equation as follows

$$N = \frac{(Z\alpha / 2)^2 \dots * p (1 - p)}{E}$$

Where **N** equals to sample size and **Z α/2** equals to 1.96 which is the critical value that divides the central 95% of the Z distribution from the 5% in the tail. P the prevalence of the outcome variable calculated from the study mentioned above to be 0.24 and **E** = the margin of error equals to 0.05.

## Data Collection, questionnaire development and validation

As we could not find a validated questionnaire in the literature that matched this study objective, we developed a new questionnaire based on previous literature. It was distributed as a self-administered questionnaire to the study participants. Level of awareness was measured by answering four main questions correctly. The participant who answered correctly considered aware and who did not were considered unaware. The four main questions are: 1- Have you ever heard of the term urgent clinics? 2- Do you think that the urgent clinics provide services similar to those of the emergency center? 3- What do you think is the main function of the urgent clinics? 4- In your opinion, what are the categories allowed to visit urgent clinics?). The questionnaire was first written in Arabic then translated into the English language by the translator. The questionnaire has two main parts. First part sociodemographic data. Second part level of awareness and pattern of utilization of UCC. The questionnaire went through a validation process where we handed it to 3 expert consultants in family medicine to evaluate the content. A pilot study was conducted for reliability on 20 patients, and feedback was taken to assure feasibility and reliability with a test-retest.

## Data Management

Data were analyzed using Statistical Package for Social Studies (SPSS 22; IBM Corp., New York, NY, USA). Categorical variables were expressed as percentages. For categorical variables, The Chi-square test was used.  $P$  value  $< 0.05$  was considered statistically significant.

## Ethical considerations

IRB approval was obtained from the IRB committee at Prince Sultan Military and Medical City. Informed consent was taken before including any subject in the study. Data collected to be maintained and treated as confidential. The gathered information was only used for this study and no other. Data will be deleted after publication.

## Results

The total number of the current study participants was 288 patients; more than half were females at 55.99%, the highest percentage was in the age group of 18-38 years at 60.07%, and 73.96% were in the married. Almost 41% of the participants have a university educational level, and 39.24% are employees. Chronic diseases were prevalent in less than half of the sample, and diabetes was the most prevalent at 17.36%. Data is shown in Table 1.

The awareness and pattern of utilization among PHCC patients about urgent care services is shown in Table 2. The results showed that only one quarter 73 (25.35%) of the patients were aware of the term urgent clinics, from them, more than a half (53.42%) visited such clinics 1-3 times in the three months before the time of study conduction, and the main cause of

**Table 1: Demographic characteristics of the patients (n=288)**

Question	Answer	Number	%
Age	From 18 to 38	173	60.07
	From 39 to 60	101	35.07
	more than 60	14	4.86
Gender	Male	125	44.01
	Female	159	55.99
Marital status	Single	65	22.57
	Married	213	73.96
	Divorced	5	1.74
	Widowed	5	1.74
Educational level	Primary Stage	19	6.60
	Intermediate Stage	22	7.64
	High School	109	37.85
	University Stage	119	41.32
	Postgraduate Studies	11	3.82
Employment status	Something else	8	2.78
	Employee	113	39.24
	Student	32	11.11
	Retired	30	10.42
	Unemployed	113	39.24
Family income	<6000	71	24.91
	6,000 to 12,000	140	49.12
	More than 12,000	74	25.96
Residence	In Riyadh	256	88.89
	Outside Riyadh	32	11.11
Chronic diseases	Diabetes	50	17.36
	Hypertension	27	9.38
	High level of fats in the blood	40	13.89
	Thyroid hormone irregularities	45	15.63
	Asthma	30	10.42
	Something else	8	2.78
	No chronic diseases	158	54.86

the visits was common cold (25.76%). Less than half of the participants reported visiting the primary clinics without booking an appointment in advance at 44.79%. The reason for this was mainly because of having difficulty booking appointments at 54.55%. The highest percentage (48.26%) thought that the urgent clinics provide services similar to that of the emergency center. More than half see that children are the categories allowed to visit urgent clinics. As scored by the participants, the main functions of the urgent clinics were treatment of chronic conditions such as blood pressure, diabetes, asthma, acute symptoms that do not require going to the emergency center and detecting health conditions that entail emergent intervention.

The awareness and pattern of utilization by gender are shown in Table 3. Females showed a statistically non-significant higher awareness than males at 27% vs. 23.2%, respectively, with a  $P$  value of 0.46. Moreover, no significant differences were found among the two genders regarding the number of visits to the urgent clinics and the reason for visits as all  $P$  values were  $> 0.05$ . However, significantly ( $P < 0.05$ ) higher percentages of females see that children and pregnant women can visit the urgent clinics at 64.8% vs. 46.4% and 46.5% vs. 28.8%, respectively. Also, a significantly lower percentage of males see that the main function

**Table 2: Awareness and pattern of utilization among PHCC patients about urgent care services**

Question	Answer	Number	%
Have you ever heard of the term urgent clinics?	Yes	73	25.35
	No	215	74.65
How many visits to the urgent care clinics during the three A last month?	0	20	27.40
	1-3	39	53.42
	4-6	6	8.22
	More than 6	1	1.37
	I do not remember	7	9.59
Was the reason for your visit to the urgent clinic one of the following reasons	Common Cold ()	17	25.76
	Abdominal Pain	6	9.09
	Chest Pains	6	9.09
	Lower Back Pain	7	10.61
	Bone fractures	3	4.55
	Headache	5	7.58
	Something else	22	33.33
Have you ever visited the primary clinics without booking an appointment in advance?	Yes	129	44.79
	No	159	55.21
What was the reason for visiting the primary clinics without an appointment?	Having Difficulty in Booking Appointments	72	54.55
	A Recent Health Problem	49	37.12
	Other Reasons	11	8.33
Do you think that the urgent clinics provide services similar to those of the emergency center?	Yes	139	48.26
	No	21	7.29
	I do not know	128	44.44
In your opinion, what are the categories allowed to visit urgent clinics?)			
	Children	161	55.90
	Males	91	31.60
	Women	124	43.06
	Elderly	176	61.11
	Pregnant Women	110	38.19
	Domestic Workers	35	12.15
	Health Center Employees	35	12.15
	People with Special Needs	89	30.90
	I do not know	75	26.04
What do you think is the main function of the urgent clinics?			
	Treatment of chronic conditions) such as blood pressure, diabetes, asthma, etc.)	135	46.88
	Refill medicine	73	25.35
	Treatment of acute symptoms that do not require going to the emergency center	126	43.75
	Detecting health conditions that entail emergent intervention	121	42.01
	Helping struggling cases to get an appointment in public clinics	116	40.28
	Follow-up pregnant women	60	20.83
	Something else	26	9.03

of urgent clinics is to help struggling cases to get an appointment in public clinics at 30.4% compared to 48.4% of females, with a *P* value of 0.002.

The difference in the awareness and pattern of utilization by participants' age is shown in Table 4. Overall, the reason for visiting the urgent clinics and the allowed category were the only points that differed significantly ( $P < 0.05$ ) by the different age groups. However, the awareness level was the highest (28.32%) among the lowest age group (18-38 years) and decreased gradually by increasing the age.

When the analysis was done according to educational level as shown in Table 5, a significantly higher percentage of low educational level participants reported visiting primary clinics without booking an appointment in advance at 51.33% vs.

37.68% of the university and above participants. In contrast, higher percentages of highly educated ones see those elderly pregnant women, healthcare employees, and special needs people allowed to visit the urgent clinics. Also, higher percentages of highly educated participants scored treatment of acute symptoms that do not require going to the emergency center and helping struggling cases to get an appointment in public clinics as the main function of the urgent clinics at 50.72% and 48.55% compared to 37.33% and 32.67%, with *P* values of 0.022 and 0.006, respectively.

According to the patients' income, there was a statistically significant (0.023) difference in the awareness level. It was the highest among those with an income of 6000-12000 SAR at 32.86%, and almost the same among the lowest and highest

**Table 3: Awareness and pattern of utilization among PHCC patients about urgent care services by gender**

Question	Answer	Male		Female		P
		Number	%	Number	%	
Have you ever heard of the term urgent clinics?	Yes	29	23.2	43	27.0	0.46
	No	96	76.8	116	73.0	
How many visits to the urgent care clinics during the three A last month?	0	11	35.5	9	22.0	0.376
	1-3	13	41.9	26	63.4	
	4-6	3	9.7	3	7.3	
	More than 6	1	3.2			
	I do not remember	3	9.7	3	7.3	
Was the reason for your visit to the urgent clinic one of the following reasons	Common Cold ()	5	18.5	12	31.6	0.19
	Abdominal Pain	2	7.4	4	10.5	
	Chest Pains	4	14.8	2	5.3	
	Lower Back Pain	3	11.1	3	7.9	
	Bone fractures	3	11.1			
	Headache	3	11.1	2	5.3	
	Something else	7	25.9	15	39.5	
Have you ever visited the primary clinics without booking an appointment in advance?	Yes	55	44.0	71	44.7	0.912
	No	70	56.0	88	55.3	
What was the reason for visiting the primary clinics without an appointment?	Having Difficulty in Booking Appointments	26	45.6	45	62.5	0.082
	A Recent Health Problem	24	42.1	24	33.3	
	Other Reasons	7	12.3	3	4.2	
Do you think that the urgent clinics provide services similar to those of the emergency center?	Yes	57	45.6	80	50.3	0.608
	No	11	8.8	10	6.3	
	I do not know	57	45.6	69	43.4	
In your opinion, what are the categories allowed to visit urgent clinics?)						
Children		58	46.4	103	64.8	0.002*
Males		43	34.4	48	30.2	0.45
Women		48	38.4	76	47.8	0.113
Elderly		73	58.4	101	63.5	0.379
Pregnant Women		36	28.8	74	46.5	0.002*
Domestic Workers		15	12.0	20	12.6	0.883
Health Center Employees		16	12.8	19	11.9	0.828
People with Special Needs		35	28.0	54	34.0	0.282
I do not know		37	29.6	36	22.6	0.183
What do you think is the main function of the urgent clinics?						
Treatment of chronic conditions) such as blood pressure, diabetes, asthma, etc.)		54	43.2	79	49.7	0.277
Refill medicine		31	24.8	41	25.8	0.85
Treatment of acute symptoms that do not require going to the emergency center		49	39.2	77	48.4	0.12
Detecting health conditions that entail emergent intervention		50	40.0	71	44.7	0.431
Helping struggling cases to get an appointment in public clinics		38	30.4	77	48.4	0.002*
Follow-up pregnant women		20	16.0	40	25.2	0.061
Something else		15	12.0	10	6.3	0.092

\*Significant P

income groups. Also, there was a statistically significant difference between the different income groups regarding visiting primary clinics and children as a category allowed to visit urgent clinics. More details and results are shown in Table 6.

According to the residence region, when the analysis was done, neither the awareness level nor the utilization pattern differed significantly between those residents in Riyadh and others living outside Riyadh, as shown in Table 7.

## Discussion

We set out this cross-sectional survey study to assess patients' awareness and utilization of urgent care services in a primary

health care center in Riyadh, Saudi Arabia. Overall, the results showed insufficient awareness levels about the urgent care services among the participated patients. In this study, we tried to document why patients in Saudi Arabia utilize UCCs for their health care needs. The results showed that patients tend to seek care in an urgent care setting due to not making an appointment and providing services similar to that of the emergency center. In a previously published study, not having to make an appointment, convenience, same-day test results, ability to get same-day medications were the main reasons for UCCs utilization.<sup>[27]</sup>

In the current study, around 45% of patients reported visiting the UCC without booking a previous appointment. This makes UCCs more accessible compared to primary care facilities.



**Table 4: Awareness and pattern of utilization among PHCC patients about urgent care services by age**

Question	Answer	Age						P
		From 18 to 38		From 39 to 60		more than 60		
		n	%	n	%	n	%	
Have you ever heard of the term urgent clinics?	Yes	49	28.32	22	21.78	2	14.29	0.302
	No	124	71.68	79	78.22	12	85.71	
How many visits to the urgent care clinics during the three A last month?	0	12	24.49	7	31.82	1	50.00	0.892
	1-3	27	55.10	11	50.00	1	50.00	
	4-6	3	6.12	3	13.64	0	0.00	
	More than 6	1	2.04	0	0.00	0	0.00	
	I do not remember	6	12.24	1	4.55	0	0.00	
Was the reason for your visit to the urgent clinic one of the following reasons	Common Cold ()	14	30.43	3	16.67	0	0.00	0.028*
	Abdominal Pain	6	13.04	0	0.00	0	0.00	
	Chest Pains	4	8.70	2	11.11	0	0.00	
	Lower Back Pain	2	4.35	5	27.78	0	0.00	
	Bone fractures	3	6.52	0	0.00	0	0.00	
	Headache	1	2.17	4	22.22	0	0.00	
	Something else	16	34.78	4	22.22	2	100.00	
Have you ever visited the primary clinics without booking an appointment in advance?	Yes	74	42.77	50	49.50	5	35.71	0.436
	No	99	57.23	51	50.50	9	64.29	
What was the reason for visiting the primary clinics without an appointment?	Having Difficulty in Booking Appointments	38	51.35	31	58.49	3	60.00	0.3
	A Recent Health Problem	32	43.24	15	28.30	2	40.00	
	Other Reasons	4	5.41	7	13.21	0	0.00	
Do you think that the urgent clinics provide services similar to those of the emergency center?	Yes	86	49.71	46	45.54	7	50.00	0.768
	No	12	6.94	9	8.91	0	0.00	
	I do not know	75	43.35	46	45.54	7	50.00	
In your opinion, what are the categories allowed to visit urgent clinics?)								
	Children	104	60.12	51	50.50	6	42.86	0.182
	Males	57	32.95	28	27.72	6	42.86	0.434
	Women	80	46.24	39	38.61	5	35.71	0.399
	Elderly	110	63.58	55	54.46	11	78.57	0.127
	Pregnant Women	80	46.24	29	28.71	1	7.14	0.001*
	Domestic Workers	24	13.87	11	10.89	0	0.00	0.277
	Health Center Employees	24	13.87	11	10.89	0	0.00	0.277
	People with Special Needs	62	35.84	23	22.77	4	28.57	0.077
	I do not know	40	23.12	33	32.67	2	14.29	0.13
What do you think is the main function of the urgent clinics?								
	Treatment of chronic conditions) such as blood pressure, diabetes, asthma, etc.)	81	46.82	47	46.53	7	50.00	0.971
	Refill medicine	45	26.01	23	22.77	5	35.71	0.552
	Treatment of acute symptoms that do not require going to the emergency center	75	43.35	44	43.56	7	50.00	0.889
	Detecting health conditions that entail emergent intervention	78	45.09	39	38.61	4	28.57	0.335
	Helping struggling cases to get an appointment in public clinics	75	43.35	36	35.64	5	35.71	0.427
	Follow-up pregnant women	44	25.43	15	14.85	1	7.14	0.05
	Something else	14	8.09	11	10.89	1	7.14	0.712

\*Significant P

Such flexibility in UCCs scheduling attracted patients, suggesting that similar scheduling within conventional primary care systems might successfully attract patients. Such suggestion is supported by the previous findings that the concept of “open access” appointment scheduling accommodates patients’ urgent health care needs while providing continuous, routine care.<sup>[28]</sup>

The recent emission in UCC industry growth has been hypothesized to be due to the public’s growing acceptance of UCCs as reliable care providers.<sup>[29]</sup> Our results support this, as almost half of participants thought the urgent clinics and emergency centers provided similar services.

Different illnesses are treatable at UCCs. Such illnesses are not chronic conditions or life-threatening ones and include mainly UTI infections, ear infections, sinus infections, pink eye, cellulitis, acute respiratory conditions, pneumonia, strep throat, and the common cold or the flu.<sup>[30]</sup> In the current study, the common cold was the most frequent cause of UCCs visits. It is suggested that any non-life-threatening medical condition that necessitates immediate attention be brought to a UCC instead of an emergency room to help alleviate the strain on emergency rooms and lower their long wait times. However, it is not suggested to use a UCC as a substitute for a primary care physician, and it is recommended to supplement primary care service with visits to

**Table 5: Awareness and pattern of utilization among PHCC patients about urgent care services by educational level**

Question	Answer	High school or less		University and above		P
		n	%	n	%	
Have you ever heard of the term urgent clinics?	Yes	34	22.67	39	28.26	0.276
	No	116	77.33	99	71.74	
How many visits to the urgent care clinics during the three A last month?	0	7	21.21	13	32.50	0.387
	1-3	19	57.58	20	50.00	
	4-6	2	6.06	4	10.00	
	More than 6	0	0.00	1	2.50	
	I do not remember	5	15.15	2	5.00	
Was the reason for your visit to the urgent clinic one of the following reasons	Common Cold ()	8	26.67	9	25.00	0.36
	Abdominal Pain	3	10.00	3	8.33	
	Chest Pains	4	13.33	2	5.56	
	Lower Back Pain	5	16.67	2	5.56	
	Bone fractures	2	6.67	1	2.78	
	Headache	2	6.67	3	8.33	
	Something else	6	20.00	16	44.44	
Have you ever visited the primary clinics without booking an appointment in advance?	Yes	77	51.33	52	37.68	0.020*
	No	73	48.67	86	62.32	
What was the reason for visiting the primary clinics without an appointment?	Having Difficulty in Booking Appointments	43	54.43	29	54.72	0.963
	A Recent Health Problem	29	36.71	20	37.74	
	Other Reasons	7	8.86	4	7.55	
Do you think that the urgent clinics provide services similar to those of the emergency center?	Yes	59	39.33	80	57.97	0.006*
	No	14	9.33	7	5.07	
	I do not know	77	51.33	51	36.96	
In your opinion, what are the categories allowed to visit urgent clinics?)						
	Children	71	47.33	90	65.22	0.002*
	Males	44	29.33	47	34.06	0.389
	Women	57	38.00	67	48.55	0.071
	Elderly	80	53.33	96	69.57	0.005*
	Pregnant Women	38	25.33	72	52.17	<0.001*
	Domestic Workers	16	10.67	19	13.77	0.421
	Health Center Employees	10	6.67	25	18.12	0.003*
	People with Special Needs	29	19.33	60	43.48	<0.001*
	I do not know	48	32.00	27	19.57	0.016*
What do you think is the main function of the urgent clinics?						
	Treatment of chronic conditions) such as blood pressure, diabetes, asthma, etc.)	72	48.00	63	45.65	0.69
	Refill medicine	33	22.00	40	28.99	0.173
	Treatment of acute symptoms that do not require going to the emergency center	56	37.33	70	50.72	0.022*
	Detecting health conditions that entail emergent intervention	55	36.67	66	47.83	0.055
	Helping struggling cases to get an appointment in public clinics	49	32.67	67	48.55	0.006*
	Follow-up pregnant women	28	18.67	32	23.19	0.345
	Something else	18	12.00	8	5.80	0.067

\*Significant P

an urgent care center given their extended office hours during the week and on weekends, which most primary care physicians do not offer.

In two studies Nathanson *et al.*,<sup>[31]</sup> Verbrugge LM *et al.*,<sup>[32]</sup> Macintyre S *et al.*,<sup>[33]</sup> have shown that females use more health care services than males, and this was mainly attributed to points that female live longer but, illogically, report greater morbidity and disability and make greater use of healthcare services at the end of life.<sup>[27-29]</sup> However, this is not a constant finding but depends partly on the type of service, where women tend to use preventive and diagnostic services more frequently, whereas men make greater use of emergency services.<sup>[34]</sup> Besides, Bertakis

*et al.*<sup>[35]</sup> reported that females have higher utilization of medical care services and higher associated charges than males. These findings are considered more or less in line with ours, where females reported higher utilization of UCCs than males, but the difference was statistically non-significant.

A review study published in 2013 that included articles on non-urgent emergency department use concluded that younger age and convenience were factors that contributed to the choice of place of service.<sup>[36]</sup> It has reported before that some patients, particularly older ones, face anxiety about whether they are choosing the proper care level, and they are reluctant to access emergency care perceive without first seeking other people

**Table 6: Awareness and pattern of utilization among PHCC patients about urgent care services by income**

Question	Answer	<6000		6,000-12,000		>12,000		P
		n	%	n	%	n	%	
Have you ever heard of the term urgent clinics?	Yes	13	18.31	46	32.86	14	18.92	0.023*
	No	58	81.69	94	67.14	60	81.08	
How many visits to the urgent care clinics during the three A last month?	0	1	8.33	14	30.43	5	33.33	0.702
	1-3	8	66.67	22	47.83	9	60.00	
	4-6	1	8.33	4	8.70	1	6.67	
	More than 6	0	0.00	1	2.17	0	0.00	
	I do not remember	2	16.67	5	10.87	0	0.00	
Was the reason for your visit to the urgent clinic one of the following reasons	Common Cold ()	3	25.00	12	30.00	2	14.29	0.079
	Abdominal Pain	1	8.33	3	7.50	2	14.29	
	Chest Pains	1	8.33	4	10.00	1	7.14	
	Lower Back Pain	4	33.33	3	7.50	0	0.00	
	Bone fractures	2	16.67	1	2.50	0	0.00	
	Headache	0	0.00	3	7.50	2	14.29	
	Something else	1	8.33	14	35.00	7	50.00	
Have you ever visited the primary clinics without booking an appointment in advance?	Yes	30	42.25	61	43.57	37	50.00	0.583
	No	41	57.75	79	56.43	37	50.00	
What was the reason for visiting the primary clinics without an appointment?	Having Difficulty in Booking Appointments	16	50.00	41	66.13	14	37.84	0.048*
	A Recent Health Problem	14	43.75	18	29.03	17	45.95	
	Other Reasons	2	6.25	3	4.84	6	16.22	
Do you think that the urgent clinics provide services similar to those of the emergency center?	Yes	29	40.85	65	46.43	44	59.46	0.199
	No	6	8.45	12	8.57	3	4.05	
	I do not know	36	50.70	63	45.00	27	36.49	
In your opinion, what are the categories allowed to visit urgent clinics?)								
Children		31	43.66	81	57.86	49	66.22	0.021*
Males		17	23.94	46	32.86	28	37.84	0.189
Women		29	40.85	59	42.14	36	48.65	0.575
Elderly		38	53.52	89	63.57	49	66.22	0.240
Pregnant Women		21	29.58	57	40.71	32	43.24	0.185
Domestic Workers		7	9.86	17	12.14	11	14.86	0.655
Health Center Employees		6	8.45	17	12.14	12	16.22	0.362
People with Special Needs		20	28.17	45	32.14	24	32.43	0.813
I do not know		26	36.62	31	22.14	15	20.27	0.038*
What do you think is the main function of the urgent clinics?								
Treatment of chronic conditions) such as blood pressure, diabetes, asthma, etc.)		37	52.11	67	47.86	30	40.54	0.363
Refill medicine		15	21.13	40	28.57	18	24.32	0.482
Treatment of acute symptoms that do not require going to the emergency center		32	45.07	61	43.57	32	43.24	0.971
Detecting health conditions that entail emergent intervention		22	30.99	65	46.43	33	44.59	0.088
Helping struggling cases to get an appointment in public clinics		32	45.07	54	38.57	28	37.84	0.599
Follow-up pregnant women		15	21.13	26	18.57	19	25.68	0.479
Something else		9	12.68	15	10.71	2	2.70	0.075

\*Significant P

views, and this can be a barrier to seeking timely emergency and urgent care.<sup>[37]</sup> In contrast, young adults are more likely to go to the emergency department or seek urgent care than visiting or contacting their primary care physicians and have lower satisfaction with primary care services.<sup>[38]</sup> In a Brazilian study, young females were identified as being more likely to misuse emergency care services due to a lack of access to primary care settings.<sup>[39]</sup>

### Study limitations

There are several limitations to this study. Perhaps most importantly, patients surveyed were those seeking care in general family medicine, chronic diseases, and urgent care clinics during the study period, rather than a population-based study in which

a random sample of community residents was interviewed about their urgent care needs. We did not verify patients' self-reported prior urgent care use. We did not also objectively determine the urgency of a patient's presenting complaint. The study assessed the UCCs utilization within three months; therefore, there may be unique seasonal variations in urgent care-seeking behaviors that cannot be analyzed here. The study was conducted at PHC centers following one health care institution in Riyadh city. Therefore the results cannot be generalized to the whole kingdom.

### Recommendations

Additional research is needed among a larger population, including different types of primary health care centers.



**Table 7: Awareness and pattern of utilization among PHCC patients about urgent care services by Residence**

Question	Answer	In Riyadh		Outside Riyadh		P
		n	%	n	%	
Have you ever heard of the term urgent clinics?	Yes	68	26.56	5	15.63	0.180
	No	188	73.44	27	84.38	
How many visits to the urgent care clinics during the three A last month?	0	20	29.85	0	0.00	0.166
	1-3	35	52.24	4	66.67	
	4-6	6	8.96	0	0.00	
	More than 6	1	1.49	0	0.00	
	I do not remember	5	7.46	2	33.33	
Was the reason for your visit to the urgent clinic one of the following reasons	Common Cold ()	16	26.67	1	16.67	0.572
	Abdominal Pain	5	8.33	1	16.67	
	Chest Pains	6	10.00	1	16.67	
	Lower Back Pain	7	11.67	0	0.00	
	Bone fractures	2	3.33	0	0.00	
	Headache	4	6.67	1	16.67	
	Something else	20	33.33	2	33.33	
Have you ever visited the primary clinics without booking an appointment in advance?	Yes	119	46.48	10	31.25	0.102
	No	137	53.52	22	68.75	
What was the reason for visiting the primary clinics without an appointment?	Having Difficulty in Booking Appointments	69	56.56	3	30.00	0.073
	A Recent Health Problem	42	34.43	7	70.00	
	Other Reasons	11	9.02	0	0.00	
Do you think that the urgent clinics provide services similar to those of the emergency center?	Yes	118	46.09	21	65.63	0.105
	No	0	0.00	1	3.13	
	I do not know	118	46.09	10	31.25	
In your opinion, what are the categories allowed to visit urgent clinics?)						
Children		144	56.25	17	53.13	0.737
Males		83	32.42	8	25.00	0.395
Women		111	43.36	13	40.63	0.768
Elderly		158	61.72	18	56.25	0.550
Pregnant Women		99	38.67	11	34.38	0.637
Domestic Workers		32	12.50	3	9.38	0.610
Health Center Employees		33	12.89	2	6.25	0.278
People with Special Needs		79	30.86	10	31.25	0.964
I do not know		66	25.78	9	28.13	0.776
What do you think is the main function of the urgent clinics?						
Treatment of chronic conditions) such as blood pressure, diabetes, asthma, etc.)		125	48.83	10	31.25	0.060
Refill medicine		66	25.78	7	21.88	0.632
Treatment of acute symptoms that do not require going to the emergency center		112	43.75	14	43.75	0.572
Detecting health conditions that entail emergent intervention		108	42.19	13	40.63	0.866
Helping struggling cases to get an appointment in public clinics		103	40.23	13	40.63	0.966
Follow-up pregnant women		57	22.27	3	9.38	0.090
Something else		25	9.77	1	3.13	0.217

Designing awareness leaflets and programs about UCC regarding the main functions of these types of clinics and improving access to all types of PHCC is essential to ensure adequate patient quick and safe assessment.

## Conclusion

Overall, only one-quarter of the studied patients know about the urgent care clinics (UCCs), and around half of them visited such clinics within the three months before the data collection. The common cold was the main cause of visiting the urgent care clinics, and more than half of the patients reported visiting these clinics because of difficulties in booking an appointment at the

primary healthcare centers and convenience with the services provided at the UCCs.

## Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient (s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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## Conflicts of interest

There are no conflicts of interest.

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