## Patients' preferences for physicians' attire in Qatar. A cross-sectional study

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# Abstract

Background: Physicians' attire is one important factor to enhance the physician-patient relationship. However, there are few studies that examine patients' preferences for physicians' attire in Qatar. This study aims to explore patients' preferences regarding their physician's attire (Business, Professional, Surgical Scrub, Casual, Qatari).

Method: A total of 800 participants were included in this study; 400 subjects from Hamad Medical Corporation (HMC) and 400 from Primary Health Care Corporation (PHCC).

Hamad Medical Corporation and Primary Health Care are major government healthcare institutions in Qatar. Any resident in Qatar can easily access them. Participants from PHCC were divided equally across the 3 health centers. This study used observational analytical cross-sectional study design, conducted at West Bay, Al Rayan, Leabaib Health Care Centers. As PHCC is divided into three main regions, we randomized the allocated health center in regards to these regions and we randomly chose the following mentioned study areas: Al Rayan health center in the Eastern area, West Bay Health Center in the middle, Leabaib health center in the Northern area and Hamad Medical Corporation Outpatients. Participants were selected using systematic random sampling, beginning with a randomly chosen individual, followed by every other patient on the physician's list. During their waiting time before seeing the physician, patients were approached and invited to participate, with the physician remaining unaware of the patient's participation status. All procedures followed the guide

lines outlined in the research information sheet. The interviewer introduced themselves, providing their name and specialty, explained the study's title and objectives, and requested that potential participants present their health card to verify age, confirm any history of mental illness, and specify their preferred language (Arabic or English). Verbal consent was obtained from all participants.

**Results**: A cross-sectional study was conducted using 800 patients enrolled, 461 (57.6%) of respondents were females. Age of subjects ranged from 18 to 65 years old. The majority of the respondents were non-Qatari (n=386, 48.3%). Most of the respondents preferred professional attire for physicians (n=541, 67.6%) and the majority preferred a female doctor slightly higher than male (n=362, 45.3% and n=325, 40.6% respectively). The most preferred attire for both family female and family male doctors was professional attire with white coat (n=507, 63.4% for female doctor attire and n=516, 64.5% for male doctor attire).

Conclusions: Patients in the PHCC and Hamad General Hospital outpatient clinics in Qatar prefer their physicians to be dressed in professional attire. Our results highlighted a view regarding physicians' attire, which can serve as a guide to improve patient's respect and enhance confidence in doctors in Qatar.

Key words: Physician attire, Business attire, Professional white coat attire, Surgical Scrub attire, Casual attire, Qatari attire.

### Introduction

Medical uniforms have been worn since medieval times. Physicians throughout the fifteenth and eighteenth centuries wore black 'frock' coats and 'plague costumes'. White attire became the standard as medical education became more regimented and educational institutions were founded, reflecting cleanliness. Scrubs in shades of green and blue were initially worn as uniforms in the 1970s. Today's standard medical attire has evolved to include business formal attire and a white coat. A patient's perception of a doctor during a patient care interaction may be influenced by the doctor's appearance in terms of competence, personability, and reliability(1,2).

Body language, gestures, facial expressions, and physical appearance all contribute to non-verbal communication. During an encounter, one of the first non-verbal cues that patients might assess is a physician's appearance, particularly their dress code. The way the physician dresses is becoming more essential since it might affect patients' preferences and views (1, 2, 3).

Research conducted prior to the global COVID-19 pandemic revealed that adult patients favored physicians wearing a white coat paired with a professional dress code (4,5). In a multisite study conducted in 2017 in the USA, preferences for medical wear among 4,000 adult patients were investigated. Of those polled, 53% stated it was essential to them, and the majority of this subgroup mentioned that it had an impact on their level of satisfaction with the care they received. Formal clothing with a white coat was the respondents' favoured clinical outfit (4). A 2015 review study comprising 30 qualifying publications involving over 11,000 patients found that formal attire with white coats was preferred in 60% of the research, while patient preferences for medical attire affected in 70% of the research. However, variables including physician's age, setting, location, and clinical context affected these results(6).

Patients' preferences were based on perceived danger of infection and the idea that a white coat may indicate increased sterility and cleanliness in a study involving 299 patients in Malaysia(7). A study of 443 patients in a Saudi Arabian primary care setting revealed that male patients who were married, educated, employed, and city dwellers valued physician attire, with 70% of those patients admitting that it affected the patient-physician relationship (8) However, when examining the impact of medical dress code on perceived professionalism and compassion in the palliative care context in the United States, a study involving 154 cancer patients revealed a lack of patient preference(9). Furthermore, when comparing formal, casual, and scrub suit dress, variations in patient satisfaction were not found among over 1100 patients in a study of obstetrician/gynecologist encounters (10). The impact of COVID-19 on clothing in the medical setting has drawn attention recently. Scrubs (81%, 298/368) were the most appropriate medical apparel, according to a study done in late 2020 and published in 2021 that examined 368 patients in an outpatient setting during the height of the COVID-19 pandemic (11).

Numerous studies have demonstrated that a variety of characteristics, including the physician's sex, specialty, medical practice environment, patient's geographic location, age, and particular ailment, can affect the way that patients perceive their physician's outfit(12, 13). According to the study of Lefor et al, patients in the intensive care unit (ICU) could prefer scrubs and a white coat with a name tag (14). Psychiatric clinic patients may believe that doctors in casual attire are friendlier, while doctors with white coats are more difficult to get along with (15). Data from various research has shown that patient perceptions, such as trust, contentment, appraisal, and feedback, may have an impact on the connection between the patient and the physician (16).

There hasn't been enough focus on how Gulf Peninsula patients are affected by dress requirements for doctors. Numerous medical specialties, including surgery and medicine, as well as inpatient and outpatient settings, have conducted extensive research on the importance of medical wear and its psychological effects on patients. Traditional Saudi Arabian clothing is distinctive and is worn by both male and female physicians. For example, female physicians wear a long skirt and Abaya with black full face and head covering veil that only shows their eyes, while male physicians wear sandals, a red-white/white headscarf called a shomagh/ghuttra, and a white robe called a thobe. Male doctors wear scrubs, white jackets, shirts and ties, pants or slacks, trainers or formal dress shoes, in addition to their culturally specific clothes. Female doctors may choose to wear head scarves that reveal their faces, white coats, skirts or slacks/jean, and high heel or sneakers etc. (8).

**Rationale of study**: Explore patients' preferences regarding their physician's attire (Business, Professional, Surgical Scrub, Casual, Qatari)

### Methods

A total of 800 participants were included in this study; 400 subjects from HMC and 400 from PHCC divided equally across the 3 health centers).

The study used observational analytical cross-sectional study design, conducted at West Bay, AI Rayan, LBB Health Care Centers and Hamad General Hospital OPD. As PHCC is divided in three main regions, we randomized the allocated health center in regards to these regions and we randomly chose the below mentioned study areas: AI Rayan health center in the Eastern area; West bay health center in the middle; Leabaib health center in the Northern area. HMC covers different outpatient clinics (specialties) within Hamad General Hospital.

**Study Population**: Patients registered to the pre-specified primary health care clinics and Hamad General Hospital Outpatients clinics, during the study period and who fitted our inclusion criteria.

### Inclusion criteria for the study:

1. Patients from 18 to 65 years of age who visited PHCC and Hamad Medical Corporation Outpatient clinics.

2. Patients who can communicate either in English or Arabic.

3. Stable patients.

**Exclusion criteria for the study:** Any patient younger than 18 years old and older than 65 years old.

Any patient who doesn't speak English or Arabic.

Any patient who refuses to participate.

Severe Mental illness (defined as: people with psychological problems that are debilitating so that their ability to engage in functional and occupational activities is severely impaired; Schizophrenia and bipolar disorder).

Patients who are prioritized as Emergency and urgent cases.

Data Collection Methods: Procedure(s) that are intrusive (such as participant logs or diaries, focus groups, interviews, or questionnaires). The poll was administered in both Arabic and English. For the English version, data was gathered using a published study called "What to Wear Today? A published study on the impact of a doctor's wardrobe on patients' trust and confidence was published in The American Journal of Medicine (2005) 118, 1279–1286. The validity and reliability of the survey were examined. The content validity of the questionnaire was evaluated by two researchers who are experienced in both clinical research and instrument creation. A 90% dependability was also obtained from the pilot testing. The University and the partnering Veterans Administration (VA) institutional review boards authorised the study. The Arabic language questionnaire requested back translation

by professional translator. A structured interviewer-led questionnaire was administered to each participant. This designed questionnaire was formed of four parts and a total of 18 questions as follows: Part A): Demographic (6 Questions): on Age, Gender, Nationality, Marital status, educational level, Occupation. Part B): (4 questions) family physician characteristics and Attire: included gender, language, Attire. Part C): The Attire and medical situations (8 Questions). Part D): Rating of importance of physician attire by sex in attire towards professionalism. (One Question with 4 subdivisions).

All interviewers were trained prior to the start of the study to aid, simplify and unifying the concept for all the participants.

The survey form was in English language; however, the observer could ask questions in the language convenient to the participant. The survey tool was in English and Arabic. As a backup plan the interviews were conducted in the preferred language? English or Arabic.

**Informed Consent**: Verbal consent was obtained from all research participants. There was no coercion or adverse implications for those who chose not to take part.

Patients attending the PHCC/OPD clinic were asked to fill out the questionnaires. Patient selection was randomized systematically by choosing the first participant randomly and then selecting every other encounter on the physicians' list.

Patients were approached and invited to participate during their waiting time before being seen by their physicians, who were unaware of whether the patients had completed the survey. All instructions mentioned in the research information sheet were followed.

The interviewer introduced themselves, including their name and specialty, explained the title and aim of the research, and then asked potential participants to show their health card to verify their age. Participants were also asked about any previous mental illness and their preferred language (Arabic or English only). Verbal consent was then obtained.

Each interviewer coded the questionnaire paper. The questions, including demographic details, pictures, and main survey items, were explained by the interviewer following the attached script. Participants were informed about the need to complete all questions.

Participants were given 20 minutes to complete the questionnaire privately. They were allowed to approach the interviewer for clarification if needed and were instructed to leave the completed questionnaire in the physician's office. Interviewers collected the papers at the end of the day. There was no anticipated health risk on any participants in the study.

**Primary outcome:** The preferences of physician attire as perceived by their patients as physician qualities in different clinical situations (emergency, private discussions, and minor clinical presentations).

**Secondary outcome:** The insight of patient satisfaction with the care provided in domains of (trust, competency, authority, care and compassion) in relation to their physician's outfit (i.e on scrubs, lab coat, casual, professional suit, local Qatari thoub or Abaya).

**Ethical Consideration:** The study was conducted after review and approval of MRC-01-20-1044 and in full compliance with Principles of Declaration, Good Clinical Practice and Laws and regulations of Ministry of Health in Qatar.

### Figure 1: Survey photographs of model male and female physicians in various attire



1	2	3	4	5
Business	Professional	Surgical Scrub	Casual	Qatari

### Results

Variables	Classification	Frequency	Percentage
Age	18-25	111	13.9
	26-40	421	52.6
	41-65	238	29.8
	≥65	29 339 461 278 386 136 159 593 47 1 133	3.6
Gender	Male	339	42.4
	Female	461	57.6
Nationality	Qatari	111 421 238 29 339 461 278 386 136 159 593 47 1 133 351 243 47 1 133 351 243 47 24 2 2 89 162 267 174	34.8
	Non-Qatari	386	48.3
	Non- Qatari Arab	136	17
Marital	Single	159	19.9
status	Married	593	74.1
	Widow/divorced	47	5.9
	Missed	1	0.1
Education	Post Graduate	133	16.6
	Grade	351	43.9
	Secondary	111 421 238 29 339 461 278 386 136 136 159 593 47 1 133 351 243 47 1 133 351 243 47 24 2 47 24 2 89 162 267	30.4
	Primary		5.9
	Illiterate	24	3
	Missed	2	0.3
Employment	Student	89	11.1
	Manual	162	20.3
	Professional	267	33.4
	Clerical	174	21.8
	Retired	102	12.8
	Missed	6	0.8

Table 1: Sociodemographic characteristics of the studied participants (N= 800)

Question	Variable	Frequency	Percentage
Which physician characteristic is mos important to you?	t		
	Age	120	15
	Gender	92	11.5
	Language	318	39.8
	Race	30	3.8
	Other	240	30
Which would you prefer to be your family	y		
doctor?	Male	325	40.6
	Female	362	45.3
	Not important	112	14
Which would you prefer to be your female	2		
family doctor?	Business	164	20.5
	Professional	507	63.4
	Surgical scrub	40	5
	Casual	31	3.9
	Qatari	55	6.9
Which would you prefer to be your male family	/		
doctor?	Business	143	17.9
	Professional	516	64.5
	Surgical scrub	52	6.5
	Casual	39	4.9
	Qatari	36	4.5

Table 2: Family Physician characteristics and their Attire preferred by participants

The majority of participants (n = 318, 39.8%) identified language as the most important characteristic of a physician, while race was considered the least important (n = 30, 3.8%). In terms of physician gender preference, slightly more participants preferred female doctors (n = 362, 45.3%) compared to male doctors (n = 325, 40.6%). When it came to physician attire, the most preferred attire for both female and male family doctors was professional clothing, with 63.4% (n = 507) favoring professional attire for female doctors and 64.5% (n = 516) for male doctors. The least preferred attire for female family doctors, it was Qatari traditional dress (n = 36, 4.5%).

Question	Variable	Frequency	Percentage
Which physician attire would you prefer for an emergency		200 0.0000	(Asso
situation, eg. (heart attack)?	Business	114	14.2
	Professional	424	53
	Surgical scrub	180	22.5
	Casual	56	7
	Qatari	23	2.9
Which would you prefer to discuss intimate social and sexual			
problems with?	Business	136	17
	Professional	486	60.8
	Surgical scrub	59	7.4
	Casual	55	6.9
	Qatari	48	6
Which would you prefer to discuss psychological problems with?	Business	162	20.3
	Professional	464	58
	Surgical scrub	49	6.1
	Casual	59	7.4
	Qatari	57	7.1
Which would you prefer for minor medical problems, eg common			
cold?	Business	122	15.3
	Professional	477	59.6
	Surgical scrub	78	9.8
	Casual	90	11.3
	Qatari	24	3

Table 3: What attire would you prefer a physician to wear in different medical situations

The majority of participants preferred professional attire for medical situations. The least preferred attire for emergencies, intimate consultations, and minor medical issues was Qatari attire, while for psychological consultations, surgical scrubs were the least favored.

 Table 4: Rating the Importance of Physician Attire in Relation to Professionalism, Based on Gender :

 (as Shown in Figure 1)

Question	Variable	Frequency	Percentage
Which of these doctors would you trust the most?	Business	129	16.1
	Professional	541	67.6
	Surgical scrub	44	5.5
	Casual	27	3.4
	Qatari	46	5.8
Which of those would you deem to be more Knowledgeable			
and competent?	Business	139	17.4
	Professional	536	67
	Surgical scrub	47	5.9
	Casual	23	2.9
	Qatari	37	4.6
Which of these doctors have the most caring and			
compassionate demeanour?	Business	119	14.9
	Professional	487	60.9
	Surgical scrub	71	8.9
	Casual	43	5.4
	Qatari	62	7.8
Which of these doctors would be more authoritative and in			
control?	Business	156	19.5
	Professional	469	58.6
	Surgical scrub	34	4.3
	Casual	24	3
	Qatari	97	12.1

The attire most preferred by participants for professionalism was professional attire, while casual wear was the least favored option for professional settings.

### Discussion

The patient-physician interaction is fundamental to the practice of medicine. Doctors strive to establish a rapport right from the start in order to create a partnership and deliver patient-centered care, which is characterized as being "respectful of, and responsive to, individual patient preferences, needs, and values." It should come as no surprise that curricula in medical schools frequently contain courses focused on enhancing patient experiences.

This study included 800 patients receiving medical care in the pre-specified primary health care clinics and Hamad General Hospital outpatient clinics to report preferences regarding physician attire in Qatar. The majority of the participants' chose language as the most important physician characteristic, while the least character was race, and the majority preferred female doctors slightly higher than males.

The preferences of respondents may vary depending on their location for a number of reasons. For instance, in the UK, patients' opinions of their doctor's clothing may be significantly impacted by the "bare below the elbows" guideline (17). Patients' tastes may also be influenced by their geographic location for cultural or even climaterelated factors. Since our study was carried out in Qatar's PHCC and Hamad General Hospital outpatient clinics, it might not be applicable to people everywhere. Previous research has shown that younger patients prefer more informal clothing than older patients, who adhere to a more formal dress code (18,19).

Physician attire represents only a minor portion of the medical profession; it does not define the person or inherently impact their performance, practice, or accomplishments. But as medical dress changes, the medical community should be aware of any possible connections between medical attire and the profession's main goal of delivering high-quality patient care. The incorporation of informal medical apparel into routine practice ought to prioritise fostering positive patient relationships, mitigating the danger of nosocomial pathogen transmission, and effectively explaining the role of physicians in patient care. While introducing themselves to patients and other team members, all doctors regardless of their attire, should make clear what their tasks are. In contrast to doctors in a white coat, doctors in casual wear should be aware of the impression they may give patients. They can try to counteract this by developing a connection with patients through other means. Nonetheless, the launch of new medical apparel offers a revolutionary chance to address enduring gender prejudices in the field (1).

According to the current study, professional attire was preferred by both family male and female doctors (64.5% for male doctors and 63.4% for female doctors). Casual clothing was the least popular choice for family female doctors (3.9%), while Qatari doctors (4.5%) had the least preferred outfit. Numerous investigations examining patients' opinions of medical wear have produced a wide range of results, many of which are contradictory and complicated by the use of several metrics and end points. Numerous research conducted on different continents have revealed a distinct patient preference for white coats, which is in line with our findings (20,21). However, some studies reveal no significant preferences, (22, 23) and others indicate that the white coat may even cause higher levels of anxiety in patients (24).

Comparable to this study, a cross-sectional study carried out in primary care clinics in Riyadh, Saudi Arabia, discovered that more than 80% of patients preferred seeing their doctor in a white coat, while 47% of participants opposed traditional Saudi clothing(8). Patients who were married, educated, or working men placed a larger value on a doctor's attire. Seventy percent of patients thought that wearing a doctor's coat improved the doctor-patient interaction (25). Additionally, a survey carried out at the outpatient clinics of King Abdulaziz Medical City (Hospital), Riyadh, Saudi Arabia, discovered that the majority of patients (62%) favoured the formal attire of physicians, which was described as a tie, shirt and pants. Just 9.7% of the patients said they favoured Saudi national attire. The majority of patients (73%) said that female doctors should wear long skirts. Up to 85% of patients said that doctors should wear the white coat (26).

This phenomena may be caused by the widespread belief that physicians in white coats are more professional and knowledgeable, which gives patients greater assurance and trust when they visit with them (27, 28). In addition, some patients believe that the white coat is a part of their culture, traditional values, and society expectations, and it makes authority easier to identify (29).

### Conclusion

In brief, we discovered that the majority of adult primary care patients felt that wearing medical apparel was significant. Professional clothes with symbolic meaning were highly valued by the study's participants. Beneficial clothing choices for doctors have a beneficial impact on how the patient perceives their professionalism, competence, and trustworthiness. We were able to group different sorts of doctor attire into fewer themes, which could aid in the creation of policies and make it easier for doctors to choose outfit combinations. Healthcare systems should take the context of treatment into account when developing dress code regulations.

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