Patients’ perceptions and preferences for physicians’ attire in hospitals in south western Saudi Arabia

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Abstract

Purpose: Data regarding patients’ perception and satisfaction about physicians providing the medical care based on their attires in Southern Region of Saudi Arabia are scarce and even lacking. The aim of this study was to assess the patients’ opinion regarding the suitable attires of physicians. Materials and Methods: A descriptive cross-sectional survey was performed on a random sample of patients from Aseer Central Hospital, Southern Military Hospital and Abha Maternity Hospital. The questionnaire collected data on their perception of physicians’ attire as well as reflection of dress on trust and willingness to discuss personal issues. Results: The study included 248 patients. The majority (81.9%) of the participants agreed on the importance for physicians to wear their medical attires. Also 84.3% of them confirmed that physician’s appearance is important source of their confidence. Skirt plus lab coat was the most favored for female physicians (39.3%). As for male physicians, scrub plus lab coat was the most preferred (33.6%) attire. Conclusion: Patients attending hospitals in southwestern Saudi Arabia preferred for their physicians to wear formal attire with white coats, rather than the Saudi national dress. Skirt plus lab coat was the most preferred for female physicians. As for male physicians, scrub plus lab coat was the most preferred attire. Patients approved the importance for physicians to wear their medical attires and confirmed that physician’s appearance is important source for their confidence. The study recommends that physicians should adopt formal attire and the institutional dress code policy should be modified to fit these preferences.

Keywords: Patients’ confidence, physicians’ attires, Southwestern Saudi Arabia

Introduction

The principal corner of a positive patient–physician relationship is based on trust, confidence, and respect. Patients looks for physicians as a major source of confidence as they provide medical complaint and also discuss vital and personal information such as medication compliance, end-of-life wishes, or sexual histories. The patient–doctor relationship is considered the cornerstone of medical care.¹,² It is the basis for all patient care. A patient’s initial consultation plays a vital role in the progress of this relationship. During this consultation, a patient will develop a first impression of his or her physician based on the physician’s verbal and nonverbal communication, as well as personal attributes such as clothing, grooming, and cleanliness.³,⁴

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Several studies have reported this issue in several countries including Japan, Pakistan, USA, and UK. These reports were using different methodological approaches in separate clinical care scenarios. They showed that a significant portion of patients associate the white coat to the image of physicians with a professional attitude, who are better prepared and more hygienic.

A study in Riyadh, Saudi Arabia showed that the majority of patients (62%) preferred physicians’ formal outfit which was defined as tie, shirt, and trousers. Only 9.7% of the patients preferred traditional Saudi dress: Thoab (white long-sleeved dress) and Shemagh (scarf with a red and white checkered pattern). Most patients (73%) also preferred long skirts to be worn by female doctors. The majority of patients preferred the white coat to be worn by physicians. Approximately half of the patients expressed no preference regarding the gender of their physicians. Confidence in the physician’s competence and experience was not significantly associated with the physician’s attire or gender.

Data regarding patients’ perception and satisfaction about physicians providing the medical care based on their attires in Southern Region of Saudi Arabia are scarce and even lacking. The aim of this work was to assess the patients’ opinion regarding the suitable attires in providing the medical care.

**Materials and Methods**

**Study design and target population**

Using a descriptive cross-sectional survey, data were collected from a random sample of patients from Aseer Central Hospital, Southern Military Hospital and Abha Maternity Hospital. The study was approved by local Ethics and Internal Review Board Committee. A signed written consent was obtained from each participant.

**Sampling**

Using the World Health Organization (WHO) manual for sample size determination in health studies, with an anticipated population proportion of 62% and an absolute precision of 7% at 95% confidence interval, the minimal sample size required for the study was calculated to be 185 persons.

**Study questionnaire**

The study instrument was prepared using Delphi technique. A group of experts after intensive literature review developed the questionnaire. The questionnaire was developed in English. The questionnaire was later translated to the local colloquial Arabic of Saudi Arabia. After translation and back translation, a panel of experts was asked to assess the preliminary questions and provide structured comments with respect to face and content validity, comprehensibility and comprehensiveness. The final version of the questionnaire was distributed among a pilot test group of patients and analyzed for internal consistency. Cronbach α was 0.71 for perception scale. Necessary modifications were made to the questions. The questionnaire collected data on patients’ perception of physicians’ attire as well as reflection of dress on trust and willingness to discuss personal issues. Background data were also collected about the sex, age, level of education (illiterate or educated), and working status (working or not).

**Data analysis**

After data were collected, it was revised, coded, and fed to Statistical Package for the Social Sciences (SPSS) software program, version 21.0 (IBM Corp. Released 2013. IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp). Descriptive statistics including frequencies and percent were used to describe the frequency of each categorical variable item. Chi-square and Fisher’s exact test were used to test for association between respondent characteristics and his selection preference. All statistical analysis was performed using two-tailed tests and α error of 0.05. A value of $P \leq 0.05$ was considered to be statistically significant.

**Results**

This study included 248 patients. Their age ranged from 25 years up to 55 years old with an average of 30 ± 5.6 years. Females constituted 68.1% of the study sample and 72.2% of the participants were married. Regarding educational level, 44.8% of the participants were university graduated, whereas 23.8% were of basic education level [Table 1].

Asking participants about the method by means of which they distinguish physicians, 31.5% mentioned physicians’ attires, 20.6% identified ID card, and 19% retorted medical accessories as stethoscopes as the most important mentioned accessory.

As for patients’ perception regarding importance of physician attires and its relation with patients’ satisfaction, the majority (81.9%) of the participants agreed on the importance for physicians to wear their medical attires. Also 84.3% of them confirmed that physician’s appearance is important source of their confidence.

Table 2 shows patients’ preference of different doctors’ attires at the different departments. In the routine clinic appointment, approximately 52% of male respondents preferred long lab coat for female physicians compared to 45.6% of female respondents, whereas 17.7% preferred uniform scrub plus lab coat for male physicians compared to 21.3% of female respondents. These differences were found to be statistically insignificant ($P > 0.05$).

Within ER department, approximately 35.4% of male respondents preferred skirt plus lab coat for female physicians, whereas 35.5% of the female respondents preferred long lab coat. Also 29.1% of male respondents preferred uniform scrub plus lab coat for male physicians compared to 24.9% of female respondents with no statistical significance ($P > 0.05$) difference.

For obstetric and gynecology department, 25.3% of male respondent preferred skirt plus lab coat for female physicians
Table 1: Description of the study sample of patients and how they recognize physicians in Aseer region, Saudi Arabia, 2018

| Respondents data                | No  | %    |
|---------------------------------|-----|------|
| Gender                          |     |      |
| Male                            | 79  | 31.9%|
| Female                          | 169 | 68.1%|
| Age                             |     |      |
| 25-                             | 98  | 39.5%|
| 30-                             | 104 | 41.9%|
| 40-                             | 35  | 14.1%|
| 50+                             | 11  | 4.4% |
| Marital status                  |     |      |
| Single                          | 53  | 21.4%|
| Married                         | 179 | 72.2%|
| Widowed/ divorced               | 16  | 6.4% |
| Educational level               |     |      |
| Basic education                 | 59  | 23.8%|
| Secondary education             | 78  | 31.5%|
| University                      | 111 | 44.8%|
| How can you recognize the Doctor among the medical staff? |   |      |
| Dress                           | 78  | 31.5%|
| Medical accessories             | 47  | 19.0%|
| ID card                         | 51  | 20.6%|
| Dress & accessories             | 28  | 11.3%|
| Dress & ID                      | 14  | 5.6% |
| ID and accessories              | 17  | 6.9% |
| All of them                     | 13  | 5.2% |
| If accessories, which one (n=105) |   |      |
| Stethoscope                     | 71  | 67.6%|
| Overhead                        | 27  | 25.7%|
| Both together                   | 7   | 6.7% |

Generally, skirt plus lab coat was the most preferred for female physicians (39.3%) followed with long lab coat (37.2%). As for male physicians, scrub plus lab coat was the most preferred (33.6%) followed with casual dressing plus lab coat.

**Discussion**

Throughout medical history, physician attire has affected the doctor-patient relationship. Hippocrates is said to have admonished: “The physician must have a worthy appearance; he should look healthy and be well nourished, appropriate to his physique; for most people are of the opinion that those physicians who are not tidy in their own persons cannot look after others well.” Modern culture often depicts physicians on television wearing surgical scrubs in their interactions with patients. In response to rising incidents of hospital-acquired infections, some European jurisdictions have imposed policies banning long sleeves, wrist watches and jewelry, also discouraging ties and white coats.

Overall, this study showed that patients in southwestern Saudi Arabia recognize physicians by their peculiar dress (78, 31.5%), their ID cards (51, 20.6%), and by their medical accessories (47, 19.0%) particularly stethoscopes (67.6% of those mentioned accessories). The majority of patients in this study (81.9%) identified the importance of physicians’ proper attire and the appearance as important (84.3%) for their confidence. Historically, the white coat has been a symbol of the medical profession as it was borrowed from laboratory workers in the mid-nineteenth century to lend credibility to the doctors who wore them. The white color was specifically chosen to associate physicians with purity and cleanliness.

As for pediatrics department, 29.1% of male respondents preferred skirt plus lab coat for female physicians compared to 21.9% of female respondents. Also 41.8% of male respondent preferred scrub plus lab coat for male physicians compared to 26.6% of female respondents without statistically significant differences (P > 0.05).

As for pediatricians, 29.1% of male respondents preferred skirt plus lab coat for female physicians compared to 20.7% of female respondents. Besides, 27.8% of male respondents preferred scrub plus lab coat for male physicians compared to 26.6% of females. These differences were statistically insignificant (P > 0.05).

Considering the internal medicine department, 13.9% of male respondents preferred long lab coat for female physicians compared to 20.7% of females preferred skirt plus lab coat. Also 36.7% of male respondents preferred uniform scrub for male physicians compared to 27.2% of females with no significant difference.
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A study in a family medicine center in Riyadh, Saudi Arabia[19] showed that participants significantly preferred Western dress (39.9%), followed by Saudi national dress (26.3%), a scrub suit with a white coat (22.3%), and scrubs only (11.5%). Respondents reported that they were more likely to follow medical advice and would return for follow-up care if a physician wore Western dress.[19] Results of this study can be used at primary health-care level in the region. Patients attending the study hospitals are the same clients for primary health care. Those patients are usually referred from the primary health-care centers to the secondary and tertiary care hospitals.

### Table 2: patients' preference of different doctors' attires at the different departments, Aseer region, Saudi Arabia, 2018

| Department               | Suitable attire for doctors | Respondent gender | Total | \( P \) |
|--------------------------|-----------------------------|-------------------|-------|--------|
|                          | Male | Female |       |       |
|                          | No   | %     | No   | %     | No    | %     |
| Routine clinic appointment |     |       |       |       |       |       |
| Long lab coat\(^a\)      | 41   | 51.9% | 77   | 45.6% | 118   | 47.6% | 0.896 |
| Skirt + lab coat\(^b\)   | 14   | 17.7% | 29   | 17.2% | 43    | 17.3% |       |
| Scrub + Lab coat\(^c\)   | 6    | 7.6%  | 11   | 6.5%  | 17    | 6.9%  |       |
| Casual + lab coat\(^d\)  | 8    | 10.1% | 15   | 8.9%  | 23    | 9.3%  |       |
| Uniform + Lab oat\(^e\)  | 14   | 17.7% | 36   | 21.3% | 50    | 20.2% |       |
| Uniform Scrub\(^f\)      | 13   | 16.5% | 21   | 12.4% | 34    | 13.7% |       |
| ER                       |     |       |       |       |       |       | 0.474 |
| Long lab coat\(^a\)      | 21   | 26.6% | 60   | 35.5% | 81    | 32.7% |       |
| Skirt + lab coat\(^b\)   | 28   | 35.4% | 57   | 33.7% | 85    | 34.3% |       |
| Scrub + Lab coat\(^c\)   | 23   | 29.1% | 38   | 22.5% | 61    | 24.6% |       |
| Casual + lab coat\(^d\)  | 13   | 16.5% | 39   | 23.1% | 52    | 21.0% |       |
| Uniform + Lab oat\(^e\)  | 23   | 29.1% | 42   | 24.9% | 65    | 26.2% |       |
| Uniform Scrub\(^f\)      | 13   | 16.5% | 33   | 19.5% | 46    | 18.5% |       |
| Obstetrics & Gynecology  |     |       |       |       |       |       | 0.296 |
| Long lab coat\(^a\)      | 19   | 24.1% | 35   | 20.7% | 54    | 21.8% |       |
| Skirt + lab coat\(^b\)   | 20   | 25.3% | 51   | 30.2% | 71    | 28.6% |       |
| Scrub + Lab coat\(^c\)   | 18   | 22.8% | 54   | 32.0% | 72    | 29.0% |       |
| Casual + lab coat\(^d\)  | 18   | 22.8% | 35   | 20.7% | 53    | 21.4% |       |
| Uniform + Lab oat\(^e\)  | 17   | 21.5% | 28   | 16.6% | 45    | 18.1% |       |
| Uniform Scrub\(^f\)      | 16   | 20.3% | 20   | 11.8% | 36    | 14.5% |       |
| Renal department         |     |       |       |       |       |       | 0.334 |
| Long lab coat\(^a\)      | 13   | 16.5% | 28   | 16.6% | 41    | 16.5% |       |
| Skirt + lab coat\(^b\)   | 20   | 25.3% | 51   | 30.2% | 71    | 28.6% |       |
| Scrub + Lab coat\(^c\)   | 18   | 22.8% | 54   | 32.0% | 72    | 29.0% |       |
| Casual + lab coat\(^d\)  | 18   | 22.8% | 35   | 20.7% | 53    | 21.4% |       |
| Uniform + Lab oat\(^e\)  | 17   | 21.5% | 28   | 16.6% | 45    | 18.1% |       |
| Uniform Scrub\(^f\)      | 16   | 20.3% | 20   | 11.8% | 36    | 14.5% |       |
| Pediatric department     |     |       |       |       |       |       | 0.489 |
| Long lab coat\(^a\)      | 9    | 11.4% | 23   | 13.6% | 32    | 12.9% |       |
| Skirt + lab coat\(^b\)   | 23   | 29.1% | 35   | 20.7% | 58    | 23.4% |       |
| Scrub + Lab coat\(^c\)   | 1    | 1.3%  | 9    | 5.3%  | 10    | 4.0%  |       |
| Casual + lab coat\(^d\)  | 6    | 7.6%  | 17   | 10.1% | 23    | 9.3%  |       |
| Uniform + Lab oat\(^e\)  | 22   | 27.8% | 45   | 26.6% | 67    | 27.0% |       |
| Uniform Scrub\(^f\)      | 18   | 22.8% | 40   | 23.7% | 58    | 23.4% |       |
| Internal medicine        |     |       |       |       |       |       | 0.636 |
| Long lab coat\(^a\)      | 11   | 13.9% | 33   | 19.5% | 44    | 17.7% |       |
| Skirt + lab coat\(^b\)   | 8    | 10.1% | 19   | 11.2% | 27    | 10.9% |       |
| Scrub + Lab coat\(^c\)   | 6    | 7.6%  | 18   | 10.7% | 24    | 9.7%  |       |
| Casual + lab coat\(^d\)  | 7    | 8.9%  | 18   | 10.7% | 25    | 10.1% |       |
| Uniform + Lab oat\(^e\)  | 18   | 22.8% | 35   | 20.7% | 53    | 21.4% |       |
| Uniform Scrub\(^f\)      | 29   | 36.7% | 46   | 27.2% | 75    | 30.2% |       

\(^a\) more than one selection was allowed \(^b\) Female dressing \(^c\) Male dressing

A study in a family medicine center in Riyadh, Saudi Arabia[19] showed that participants significantly preferred Western dress (39.9%), followed by Saudi national dress (26.3%), a scrub suit with a white coat (22.3%), and scrubs only (11.5%). Respondents reported that they were more likely to follow medical advice and would return for follow-up care if a physician wore Western dress. Results of this study can be used at primary health-care level in the region. Patients attending the study hospitals are the same clients for primary health care. Those patients are usually referred from the primary health-care centers to the secondary and tertiary care hospitals.

**Conclusion**

In conclusion, patients attending hospitals in southwestern Saudi Arabia preferred for their physicians to wear formal attire with white coats, rather than the Saudi national dress. Skirt plus lab coat was the most preferred for female physicians. As for male physicians, scrub plus lab coat was the most preferred attire. Patients approved the importance for physicians to wear their medical attires and confirmed that physician's appearance is important source for their confidence. The study recommends that physicians should adopt formal attire and the institutional dress code policy should be modified to fit these preferences.
This will improve patients’ compliance and improve clinical outcomes.

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Nil.

**Conflicts of interest**
There are no conflicts of interest.

**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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