

# Patients' preferences for physicians' attire in Saudi Arabia

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## ABSTRACT

**الأهداف:** تقييم مدى تفضيل المرضى السعوديين لزي الأطباء، وتأثير ذلك على مستوى رضا وثقة المرضى في أطباءهم.

**الطريقة:** أُجريت هذه الدراسة المقطعية خلال الفترة من مايو إلى يونيو 2011م وذلك على المرضى المنتظرين في العيادات الخارجية، مدينة الملك عبد العزيز الطبية، الرياض، المملكة العربية السعودية. وتم سؤال المرضى عن اختيار تفضيلاتهم تجاه الزي الطبي للأطباء والطبيبات. لقد قمنا بسؤال المرضى أسئلة متعددة ومتعلقة بتفضيلاتهم تجاه زي الأطباء الذكور والإناث، وجنس الطبيب، وتأثير مظهر الأطباء على ثقة المريض.

**النتائج:** شملت عينة المرضى 399 مريض منهم 231 ذكور و186 أنثى، ولقد كان متوسط عمر المرضى 37 عاماً. أشارت نتائج الدراسة إلى أن أغلبية المرضى (62%) يفضلون الأطباء الذين يرتدون الزي الرسمي (ربطة العنق، قميص، وسروال)، فيما كان 9.7% من المرضى فقط يفضلون الزي الوطني السعودي (الثوب والشماغ). وكانت أغلبية المرضى (73%) يفضلون بالنسبة للطبيبات أن يرتدين تنورة طويلة، و85% من المرضى يفضلون بالنسبة للأطباء ارتداء البالطو الأبيض. ولقد أظهر حوالي 50% من المرضى عدم اهتمامهم بجنس الطبيب. كما لم ترتبط الثقة في كفاءة الطبيب وخبراته بشكل واضح من الناحية الإحصائية بلباس الطبيب أو جنسه ( $p=0.238$ ).

**خاتمة:** أظهرت هذه الدراسة بأن أغلبية المرضى يفضلون أن يرتدي الأطباء الزي الرسمي، إلا أنهم لم يعيروا اهتماماً بنوعية جنس أطباءهم. وأن مستوى الثقة في الأطباء لا يتعلق بمظهرهم الخارجي.

**Objectives:** To assess Saudi patients' preferences regarding Saudi physicians' attire, and its influence on patients' level of trust and confidence in their physician.

**Methods:** A cross-sectional survey was conducted from May to June 2011 among patients waiting to be seen by their physicians from the outpatient medical clinics of King Abdulaziz Medical City, Riyadh, Kingdom of

Saudi Arabia. Patients were asked multiple questions, which included their choice of preference regarding the attire of male and female physicians. Additionally, patients were asked questions related to their preferences regarding their physician's gender, and the influence of physician's appearance on patient confidence.

**Results:** A total of 399 patients were interviewed (231 males, 168 females). The mean age was 37 years. Most of the patients (62%) preferred physicians' formal outfit, which was defined as; tie, shirt, and trousers. Only 9.7% of the patients preferred national Saudi attire (thoab and shemagh). Most patients (73%) preferred long skirts to be worn by female doctors. Up to 85% of patients preferred the white coat to be worn by physicians. Approximately 50% 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 ( $p=0.238$ ).

**Conclusion:** Most patients prefer physicians to wear formal attire, however, the gender of the treating physician was not shown to be of particular importance. In addition, the level of trust in a physician is not related to his/her external appearance.

*Saudi Med J 2012; Vol. 33 (7): 763-767*

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*Received 17th April 2012. Accepted 11th June 2012.*

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**Disclosure.** Authors declare no conflict of interests, and the work was not supported or funded by any drug company.

The effect of a physician's attire and external appearance on the patient/physician relationship is not limited to modern medicine. Hippocrates (460 BC-370 BC) stated that the physician "must be clean in person, well dressed, and anointed with sweet smelling unguents".<sup>1</sup> Nevertheless, the physician's attire has garnered attention since the end of the 19th century, when the white coat was introduced among physicians as a symbol of professionalism. Today, physicians' attire is considered an important element of medical professionalism. Physicians' attire varies among individuals, countries, cultures, and work environments. It ranges from the traditional formal white coat to a more casual attire. Many physicians adapt their attire to fit their cultural background, or their patients' expectations and preferences. Regardless of the type of attire, physicians are expected to maintain a standard of attire that conveys their professional integrity, and is consistent with their cultural customs. Many studies have addressed patients' perceptions or preferences regarding the physician attire in different parts of the world. For example, Rehman et al<sup>2</sup> reported that physicians who dressed professionally not only gained the trust of their patients, but also elicited increased patient compliance with follow-up care. In a study in New Zealand<sup>3</sup> of 249 outpatients and 202 inpatients, the preferred physician attire was found to be semiformal, followed by a white coat. The least preferred attire was jeans.<sup>3</sup> Interestingly, the white coat is no longer the most commonly used attire by physicians, as demonstrated in 2 different studies.<sup>4,5</sup> The first study was conducted in 1991, and showed that more than 70% of hospital physicians and medical students wore a white coat more than 75% of the time.<sup>4</sup> The second study performed in 2004, showed a significant reduction in the popularity of the white coat among physicians, showing that only 13% of physicians chose to wear a white coat.<sup>5</sup> Patients' preferences and perceptions regarding physician's attire in the Kingdom of Saudi Arabia (KSA) have not previously been addressed. It is particularly important to address such preferences in KSA as patients' preferences regarding physician's attire differ widely across the globe, reflecting differences in cultural and educational background. A Saudi physicians' attire is different from the attire in many parts of the world. Most male Saudi physicians wear Saudi national attire (thoab and shemagh), whereas most Saudi female physicians wear a conservative dress (a long skirt and covered face) as a reflection of conservative Saudi culture. The objective of this study was to assess Saudi patient's preferences and perceptions regarding Saudi physician's attire, and to evaluate the

influence of physician's attire on the patient's level of trust and confidence in their physicians.

**Methods.** This cross-sectional study was conducted from May to June 2011. Patients who participated in the study were male and female adult patients waiting to be seen by their physicians from the waiting areas in outpatient medical clinics at King AbdulAziz Medical City, Riyadh, KSA. Patients who were thought to be unable to answer the questionnaire due to acute illness or dementia, or those who refused to participate in the study were excluded from participation. The face-to-face interview was completed before patients were seen by their physicians, who were unaware whether the patients had completed the survey. The study was approved by the institutional review boards of King Abdullah International Medical Research Center. We utilized a questionnaire regarding patient's preferences and perceptions of physician's attire that we developed based on similar surveys in the literature. The questionnaire was modified to address Saudi national attire and culture as reflected in the attire of both male and female physicians. After appropriate modification, the questionnaire was administered to 20 volunteer patients to evaluate its clarity. The questionnaire included questions related to the patient's preferences for physician's appearance and attire, as well as the influence of attire on the patients' level of trust and confidence in their physician. We asked each patient to select his/her preference for physician attire from different colored photographs presenting different styles of attire for both male and female physicians.

Analyses were conducted using SAS® version 9.2 (SAS Institute Inc, Cary, NC, USA). Data were analyzed using descriptive statistics, including means, standard deviations (SD), and percentages. The association between patients' preferences for physician's attire and demographic characteristics, such as gender and education level were analyzed using the chi-square test for homogeneity. All statistical tests were considered significant at  $p \leq 0.05$ .

**Results.** A total of 416 surveys were handed out over a 2-month study period. Seventeen patients refused to participate, mainly because they could not wait the time required for the interview. In all, 399 participants were interviewed in the medical outpatient clinics, which yielded a response rate of 96%. Of the patients surveyed, 231 (57.9%) were male patients, and 263 patients (66%) were educated (had completed high school or higher). The mean age of the study population was  $37.2 \pm 12.2$  years. Most patients (62%) preferred that male

physicians wear formal attire (tie, shirt, and trousers). Saudi national attire (thoab and shemagh) was preferred by only 9.7% of patients. Most patients (73%) preferred that female physicians wear long skirts. The preference for male physician's attire differed significantly between male and female patients ( $p=0.024$ ), whereas preferences for female physician's attire did not differ significantly between men and women ( $p=0.260$ ) (Table 1). Most patients (85%) preferred that the physician wears a white coat. Men and women did not differ with respect to their preference for a white coat ( $p=0.238$ ). Saudi patients preferred that male physicians wear formal attire and female physicians wear long skirts as a reflection of the physician's respect for their patients and the medical profession. However, confidence

in the physician's competence, medical knowledge, and expertise were not significantly associated with the physician's attire or gender ( $p=0.238$ ). Regarding patient's preferences and level of education, we found that educated patients had a greater preference for formal attire for their male physicians than did non-educated patients ( $p<0.033$ ). This trend was not maintained for the attire of female physicians ( $p=0.086$ ). There was no significant association between education level and white-coat preference ( $p=0.490$ ). There was a significant association between education level and the preference for a physician of a particular gender ( $p<0.001$ ), but there was no significant association between educational level and whether a female doctor should cover her face ( $p=0.601$ ) (Table 2).

**Table 1** - Patients' preference regarding physicians' attire and other variables among the participants included in a study at the outpatient medical clinics at King AbdulAziz Medical City, Riyadh, Kingdom of Saudi Arabia.

| Variables                                                          | Male<br>n=231 | Female<br>n=168<br>n (%) | Total<br>n=399 | P-value |
|--------------------------------------------------------------------|---------------|--------------------------|----------------|---------|
| <i>Attire preference for male physicians</i>                       |               |                          |                |         |
| Scrubs                                                             | 31 (13.4)     | 21 (12.5)                | 52 (13.0)      | 0.024   |
| Formal attire                                                      | 155 (67.1)    | 93 (55.3)                | 248 (62.0)     |         |
| Saudi national attire                                              | 20 (8.6)      | 19 (11.3)                | 39 (9.7)       |         |
| No preference                                                      | 25 (10.8)     | 35 (20.8)                | 60 (15.0)      |         |
| <i>Attire preference for female physicians</i>                     |               |                          |                |         |
| Scrubs                                                             | 16 (6.9)      | 6 (3.5)                  | 22 (5.5)       | 0.260   |
| Long skirt                                                         | 167 (72.2)    | 125 (74.4)               | 292 (73.0)     |         |
| Pants                                                              | 24 (10.3)     | 13 (7.7)                 | 37 (9.2)       |         |
| No preference                                                      | 24 (10.3)     | 24 (14.2)                | 48 (12.0)      |         |
| <i>White coat preference</i>                                       |               |                          |                |         |
| Yes                                                                | 189 (82.1)    | 151 (89.8)               | 340 (85.0)     | 0.238   |
| No                                                                 | 18 (7.3)      | 4 (2.3)                  | 22 (5.0)       |         |
| No preference                                                      | 24 (10.4)     | 13 (7.7)                 | 37 (9.2)       |         |
| <i>Physician's clothing is reflective of:</i>                      |               |                          |                |         |
| <i>The degree of respect he/she has for the patients</i>           |               |                          |                |         |
| Yes                                                                | 182 (78.7)    | 141 (83.9)               | 323 (81.0)     | 0.196   |
| No                                                                 | 49 (21.2)     | 27 (16.0)                | 76 (19.0)      |         |
| <i>The degree of respect he/she has for the medical profession</i> |               |                          |                |         |
| Yes                                                                | 193 (83.5)    | 150 (89.2)               | 343 (86.0)     | 0.103   |
| No                                                                 | 38 (16.4)     | 18 (10.7)                | 56 (14.0)      |         |
| <i>The degree of his/her medical knowledge and expertise</i>       |               |                          |                |         |
| Yes                                                                | 109 (47.1)    | 69 (41.0)                | 178 (44.0)     | 0.225   |
| No                                                                 | 122 (52.8)    | 99 (58.9)                | 221 (56.0)     |         |
| <i>Clothing affects patient's confidence</i>                       |               |                          |                |         |
| Yes                                                                | 99 (42.8)     | 82 (49.1)                | 181 (45.0)     | 0.238   |
| No                                                                 | 132 (57.0)    | 86 (50.9)                | 218 (55.0)     |         |
| <i>Preference regarding physician's gender</i>                     |               |                          |                |         |
| Male                                                               | 100 (43.2)    | 18 (10.7)                | 118 (29.5)     | <0.001  |
| Female                                                             | 3 (1.3)       | 74 (44.3)                | 77 (19.9)      |         |
| No preference                                                      | 128 (55.4)    | 76 (44.9)                | 204 (50.8)     |         |
| <i>I prefer a female physician</i>                                 |               |                          |                |         |
| To cover her face                                                  | 95 (41.1)     | 64 (38.1)                | 159 (39.8)     | 0.825   |
| Not to cover her face                                              | 28 (12.1)     | 22 (13.1)                | 50 (12.5)      |         |
| No preference                                                      | 108 (46.7)    | 82 (48.8)                | 190 (47.6)     |         |

**Table 2** - Patients' preference regarding physicians' attire and other variables according to the level of education.

| Variables                                      | Educated<br>N=263 |        | Non-educated<br>N=136 |        | P-value |
|------------------------------------------------|-------------------|--------|-----------------------|--------|---------|
|                                                | n (%)             |        |                       |        |         |
| <i>Attire preference for male physicians</i>   |                   |        |                       |        |         |
| Scrubs                                         | 35                | (13.3) | 17                    | (12.5) | 0.033   |
| Formal attire                                  | 174               | (66.1) | 74                    | (54.4) |         |
| Saudi national attire                          | 19                | (7.2)  | 20                    | (14.7) |         |
| No preference                                  | 35                | (13.3) | 25                    | (18.3) |         |
| <i>Attire preference for female physicians</i> |                   |        |                       |        |         |
| Scrubs                                         | 17                | (6.4)  | 5                     | (3.6)  | 0.086   |
| Long skirt                                     | 188               | (71.4) | 104                   | (76.4) |         |
| Pants                                          | 30                | (11.4) | 7                     | (5.1)  |         |
| No preference                                  | 28                | (10.6) | 20                    | (14.7) |         |
| <i>White coat preference</i>                   |                   |        |                       |        |         |
| Yes                                            | 221               | (84.0) | 119                   | (88.1) | 0.490   |
| No                                             | 16                | (6.0)  | 5                     | (3.7)  |         |
| No preference                                  | 26                | (9.8)  | 12                    | (8.1)  |         |
| <i>Preference regarding physician's gender</i> |                   |        |                       |        |         |
| Male                                           | 84                | (31.9) | 34                    | (25.1) | 0.001   |
| Female                                         | 35                | (13.3) | 42                    | (31.1) |         |
| No preference                                  | 144               | (54.7) | 60                    | (43.7) |         |
| <i>I prefer a female physician</i>             |                   |        |                       |        |         |
| To cover her face                              | 101               | (38.4) | 58                    | (42.6) | 0.601   |
| Not to cover her face                          | 32                | (12.1) | 18                    | (13.2) |         |
| No preference                                  | 130               | (49.4) | 60                    | (44.1) |         |

**Discussion.** Our study demonstrated that patients in KSA prefer that their male physicians wear formal attire and a white coat, and that their female physicians wear long skirts. Our patients believe that such formal attire is a reflection of the degree of respect physicians maintain toward their patients, and of physician's medical professionalism. However, confidence in the physician's ability and the degree of his/her medical knowledge and expertise were not associated with the physician's attire or gender. Notably, our study found that although Saudi national attire is common among Saudi physicians, only 9.7% of our patients preferred that Saudi physicians wear Saudi national attire. Although KSA is characterized by a conservative culture, particularly regarding women's issues, our patients had no preference regarding the gender of their physician, or whether a female physician covered her face. Moreover, educated patients, but not uneducated patients preferred that males wear formal attire; neither group expressed a preference regarding the female attire. There was no significant association between the level of education and white-coat preference.

Our study is unique as it addresses the local attire relevant to Saudi culture worn by both male and female physicians. Most studies investigating the potential influence of physicians' attire on patients' preferences and perceptions have found that patients favor formal

attire (with a white coat), which most patients consider a reflection of the physician's expertise and credibility. In the US, 76.3% of 400 patients significantly favored the use of professional attire, including a white coat.<sup>2</sup> Regarding white coat preference, there is a strong belief among patients that physicians should wear a white coat. The results of our study support this belief. Dunn et al<sup>6</sup> and Harnett<sup>7</sup> found that 59% of oncology patients, and 65% of inpatients preferred their physicians to wear white coats. However, Gooden et al<sup>8</sup> found that 48% of patients, and 36% of inpatients preferred their physicians to wear white coats.

In a study investigating patient's attitudes toward the physical characteristics of family practice physicians, investigators concluded that a name tag, white coat, and visible stethoscope were highly desirable attire, whereas sandals and tennis shoes were the least desirable attire.<sup>9</sup> The authors concluded that patients preferred a traditionally dressed physician compared to one who was dressed more casually. In another study from Australia,<sup>8</sup> patients reported feeling more confident and better able to communicate with physicians who wore white coats.

The preference for white coat attire by patients can be explained by patient's belief that the white coat is a reflection of cleanliness, respect, and professionalism. As stated above, there is a strong perception among

the public that physicians should wear white coats. Moreover, formal attire is more practical and useful in daily practice. The preference for female physicians to wear long skirts is expected, and consistent with the work environment in KSA, where most (but not all) Saudi female physicians wear long skirts most of the time in their daily practice. The finding that only 9.7% of patients preferred for Saudi physicians to wear Saudi national attire is somewhat surprising; patients themselves wear Saudi national attire, but they do not prefer that their physicians wear it. This could be explained by the public image of physicians wearing formal attire with a white coat, or by some patients' beliefs that Saudi national attire is not practical and should not be worn in a professional environment.

The strength of this study is that it is a study conducted in KSA to address physician's attire. Moreover, this study obtained a very good response rate. We used photographs to depict many different types of attire, and to ensure that patients understood what was being asked.

Our study has some limitations. This study was a single-center study performed in medical clinics at an academic institution. Consequently, patients' preferences may not be representative of all Saudi outpatients. Therefore, more studies in different healthcare specialties and multiple centers are needed. In addition, other hospitals may have different patients background and culture, which may reflect their attire preferences. We recommend that the hospital dress code should take into account the patient's preferences as an important factor. Likewise, we encourage further studies in this area to evaluate the influence of different physician's attire on patients satisfaction and compliance to the treatment. Lastly, inpatient preference toward the physicians' attire should be evaluated.

In conclusion, Saudi patients who participated in our study preferred for their male physicians to wear formal attire with white coats, rather than the Saudi national attire. The patients we surveyed preferred their female physicians to wear long skirts. Nevertheless, the level of trust in a physician is not related to his/her external appearance. We strongly recommend that physicians adopt formal attire with a white coat, and the institutional dress code policy should be modified to fit these preferences. This is consistent with patients' preferences, which will ultimately result in better compliance and improved outcomes.

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