# **Outpatient's Preference and Attitudes Towards the Thai Physician's Attire:** A Cross-Sectional Study

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## Abstract:

Objective: To determine Thai, outpatients' preference and attitudes towards various styles of a physicians' attire, whilst they were on duty at Songklanagarind Hospital, within Songkhla province, Thailand.

Material and Method: A cross-sectional study was conducted at Songklanagarind Hospital, Songkhla, Thailand; during the periods of January to March, 2015. Outpatients, who visited and were waiting to see their doctor, were approached by simply, convenience randomization. Demographic characteristics of participants along with their preference on attire were collected by using a self-rating questionnaire enclosed with 3 various styles of attire pictures.

Results: Most patients preferred both male and female physicians, who wore white coats (70.0%), while they were on duty, either during weekdays or over the weekend. Similarly, the patients stated that they trusted physicians, who wore white coats (92.2%), more than those in a style of formal attire, (7.5%) or casual clothing (0.3%) during the weekday due to; a sense of professionalism and knowledge. Although, most patients also preferred physicians wearing white coats over the weekend and holiday periods (50.4%) they could accept a form of smart, casual dress, (45.0%) more so than a style of formal attire (4.7%).

Conclusion: Most patients preferred and tended to trust physicians, who wore white coats during both official and non-official times.

Keywords: attire, attitude, physician, preference

#### Introduction

To provide the most felicitous medical service, the "patient-physician relationship" is one of the most significant foundations for any patients' attitude and trust-worthiness. Recent studies have revealed that physicians typically make a first impression on their patients via both verbal and nonverbal communication as well as personal attributes such as; clothing, grooming, and clean-liness. In classical Greece a physicians dress often had an effect on the patient-physician relationship. Since the era of Hippocrates, sociologists, psychologists and physicians have also recognized the effects of outer appearances on people's experiences. For instance; interpersonal relationships and job-related successes.

To date there is no consensus as to the most appropriate form of dress code for physicians'. The outer appearance regarding issues in relation to health care professionals has always had an implication towards the attire of "the white coat". Such "white coats" have been a symbol of a medical professional, which patients seemingly have a preference to, it also increases the patient's comfort and confidence. (Typically one identifies this "white coat" attire, within a hospital setting, as that person or persons as being a medical professional.)

This being said, the type of attire wore by physicians may improve a patients ease of communication, encourage the doctor-patient relationship<sup>8</sup> further as well as identifying physicians from lay persons in critically, clinical situations.<sup>9</sup>

On the other hand, the white coat could increase the risk of spreading nosocomial infections, even if it is a indirect infection. The sleeves and pockets of such white coats could be a reservoir of bacteria. However, the higher risk of infection, which could be carried by the physicians' white coat, did not influenance any patients' opinion. They still felt comfortable with physicians who wore such white coats. 12

Fourteen years ago, a study of Thai psychiatric patients' attitudes of their psychiatrists' attire found that the patients, for the most part, preferred psychiatrists, who wore formal attire as well as or a white coat. The psychiatric patients specified that both these types of attire seemed to make psychiatrists more capable, professional, friendly and empathetic.<sup>13</sup>

However, no current study has assessed further outpatient's preferences of the physicians' attire within the other hospital departments, especially in Thailand and South-East Asia within this decade. Hence, the purpose of this study is to determine how the different types of physician's attire influence the attitude of outpatients at various out patient department, which may be used as useful information in encouraging all physicians to wear suitable, appropriate and encouraging attire.

This cross-sectional study was conducted at Songklanagarind Hospital, an 840 bed medical-school hospital in the south of Thailand, during the periods of January the 1<sup>st</sup> until March the 31<sup>st</sup>, 2015. The main objective was to study the Thai outpatients' preference and attitude towards styles of their physicians' attires, while the doctors were on clinical duty.

## **Material and Method**

# **Population**

All outpatients, who visited and were waiting to see doctors at all outpatient clinics, except the pediatric clinic, were approached at random. With the estimated proportion of prevalence to white coat attire a 5.0% margin of error for the study of patient proportion was required as below:

The estimated proportion is 50.0% with a delta of 5.0%, then the sample size required should be at least 384.

Sample size 
$$n = \frac{Z_{\alpha}^{2}PQ}{\frac{2}{d^{2}}} = \frac{1.96^{2}(0.50)(1-0.50)}{(0.05)^{2}}$$
 =384 patients

#### The inclusion criteria

- 1. Patients of all ages at all outpatient clinics. (With the exception of the pediatric clinic.)
  - 2. Patients who were above 18-years of age.
- 3. Patients, who could read, write and understand the Thai language.

#### The exclusion criteria

- 1. Patients at pediatric clinics.
- 2. Patients who were diagnosed as having either; moderate or severe mental retardation.
  - 3. Patients, who were diagnosed as terminally ill.

#### Measurement

Convenience, random sampling was conducted on patients at the waiting room of our outpatient clinics. Self-report questionnaires were used to determine patients' preference as well as confidence, according to the different types of attire their doctors wore at work, whilst performing each kind of duty. The purpose of narrowing the question to separated circumstances was not so much as to focus on how much, more the patients preferred their doctors' attire, but to indicate the doctorpatient relationship in various types of clinical situations. The content validity of the questionnaire was assessed with Cronbach's alpha of 0.98. The questionnaire was enclosed with demographic characteristics such as; sex, age, marital status, educational level, occupation, religious preference and pictures of 3 attire styles: White coat (Figure 1), formal attire (Figure 2) and smart casual attire (Figure 3). Patients were asked to report their preference and confidence for each style of attire via a rating-scale. The minimum and maximum scores were; 0 and 5 for each question in regards to their feelings

and attitude towards each kind of attire. To interpretation the score, rating scales were used as below:

0=Not satisfied at all

1=Satisfied a little bit

2=Quite satisfied

3=Satisfied

4=Very satisfied

5=Extremely satisfied

The questionnaires were collected immediately, after completion by the patients, by research assistants, who were not involved with the investigation team. Statistical analysis: The data was analyzed by use of descriptive statistics coupled with the R program. General information as well as the results of the samples were shown in; frequency, percentages, means and standard deviations.



Female: Dark color-long sleeves jacket, dress and high-heel shoes Male: Dark color-long sleeves shirt, neck tie, slacks and leather shoes

Figure 1 Formal attire



Female: White coat, dress and high-heel shoes

Male: White coat, slacks and leather shoes

Figure 2 White coat



Female: colorful polo-shirt, short skirt and sandal shoes

Male: colorful polo-shirt, jeans and moccasin

Figure 3 Casual attire

## **Results**

From a total of 387 patients, 226 (58.4%) were female and 161 (41.6%) were male. The mean age was 44.6 (standard deviation (S.D.)=13.3). Most of those surveyed were Buddhist, married and had graduated with a Bachelor or higher level degree in education. The general characteristics were not different between either male or female patients (Table 1).

**Table 1** Demographic characteristics of patients (n=387)

| General information                 | Number (%)          |
|-------------------------------------|---------------------|
| Sex                                 |                     |
| Male                                | 161 (41.6)          |
| Female                              | 226 (58.4)          |
| Age (years)                         |                     |
| Mean±S.D. (min-max)                 | 44.62±13.26 (19-80) |
| Marital status                      |                     |
| Single                              | 68 (17.6)           |
| Married/seprerated                  | 267 (69.0)          |
| Divorced/widowed                    | 52 (13.4)           |
| Education                           |                     |
| Uneducated/primary school           | 39 (10.1)           |
| Middle school                       | 15 (3.9)            |
| Secondary school                    | 59 (15.2)           |
| Certificate of vocational education | 58 (15.0)           |
| Bachelor degree or higher           | 216 (55.8)          |
| Occupation                          |                     |
| Employee                            | 25 (6.5)            |
| Personal business/merchandise       | 124 (32.0)          |
| Bureaucrat/state enterprise officer | 112 (28.9)          |
| Private company employee            | 38 (9.8)            |
| Agriculture/fishery                 | 35 (9.0)            |
| Unemployed/housewife                | 42 (10.9)           |
| Student                             | 11 (2.8)            |
| Religion                            |                     |
| Buddhist                            | 248 (64.1)          |
| Muslim                              | 139 (35.9)          |

S.D.=standard deviation

According to this survey, the outpatients at Songklanagarind Hospital reported that they preferred both male and female physicians to be dressed in the attire of a white coat (73.0%) when they were taking their histories of illnesses, conducting physical examinations and during their initial treatments. The mean score of white coat preference was 3.9 (S.D.=1.9, median=5). Additionally, casual attire was not preferred by any patient during the period of their initial treatment (Figure 4).

On the subject of attitude towards the physicians' attire, patients also referred that they felt more confident

with all physicians, who were wearing a white coat (more than 75.0%). This was because both male and female physicians were considered to be more professional and trustworthy, whilst dressed in this kind of attire. 87.0% of patients noticeably pointed out that the white coat attire could have an effect on their therapeutic adherence, additionally 76.0% of them also indicated that it had an influence on their perception of the physicians' reliability and respectability. The second preference, which inspired confidence, was that of an attire that was formal in nature (Figure 5).

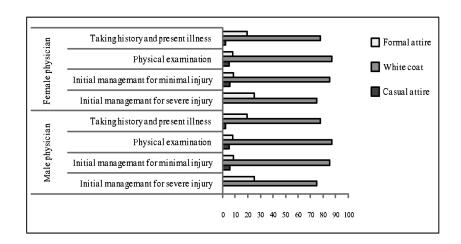


Figure 4 The patient's preference regarding physician's attires: types of duty

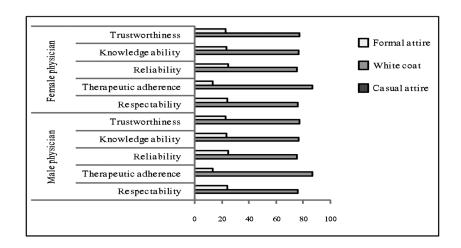


Figure 5 The patient's attitude toward physician's attires

In regards to the weekday–shifts, patients indicated that they also have a preference towards that of the white coat attire (92.2%), while formal clothing was accepted at a level of around 7.5%. Only 0.3% preferred a style of casual dress. However, 45.0% pointed out that they felt a sense of satisfaction towards causally–dressed physicians during weekend and holiday shifts. In so saying however, (50.4%) of patients still preferred those physicians, who wore a white coat. Coupled with this, patients were more receptive towards those, who wore formal attire less so than those wearing this style of dress on weekdays (4.7% and 7.5% respectively) There were no significant differences between the gender of the attending physicians (Figure 6).

#### **Discussion**

To our knowledge within this decade, our survey is the first study of outpatient's preference towards physician's regarding their attire on duty that has used a self-rating questionnaire in South East Asia. Enclosed, are the color pictures of each style of attire, for convenience, in regards to distinguishing each style of dress, when completing the questionnaires This would also be helpful for the implications when applying the results of this study

because, the various definitions of each attire can be easily classified.<sup>14</sup> As stated, by our study, which surveyed outpatient clinics, Thai patients seem to build some degree of the "patient-physician relationship", which, on this case, refers to the patients' attitude and trustworthiness on the physicians' appearance and the style of attire wore when they were on duty. (These results coincidence with the study conducted in 2002).<sup>1</sup>

The "white coat" appearance has been maintained as a significant symbol of medical professionalism, confidence and trust worthiness for Thai patients, as has been indicated since 1987 from the study of Dunn et al. <sup>5</sup> To date, most patients prefer their physicians to wear a white coat during their hospital visits on both weekdays, over the weekend and during holiday periods. <sup>15</sup>

However, over the last 14 years, Thai patients, in our study, seemed to embrace this on a more occasional context. They accepted formal attire as a second selection during weekday clinic visits, but they stated that they preferred physicians, who wore a more casual style of dress, rather than a more formal type of attire over the weekend or during holiday periods.

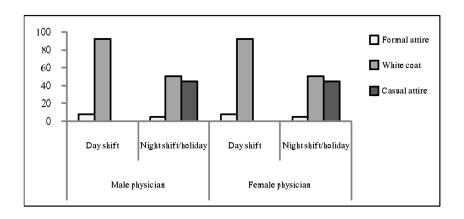


Figure 6 The preference of patients regarding physician's attire while on duty

These results emphasized the changing values among Thai people, unlike the study by Sangkool and Udomratn in 2001<sup>13</sup> at the same hospital. This previous study found that patients had a preference and confidence level regarding the wearing of white coats or formal attire to be almost similar.

Therefore, the white coat is, nowadays, not truly regarded as a sacred symbol to distinguish a medical professional in Thailand. Patients could more assent several physicians attire on condition that their physicians looked "proper" in specific situations. To highlight this assumption, patients in 2015 referred that a style of casual attire was also appropriate for physicians working on night shifts, over weekends or during holiday periods, while the study of Thai physician attire at the same hospital 14 years ago preferred the wearing of formal attire regardless of any time period. (23.0%).

According to the physicians, who wore casual attire, while they were on duty, patients reported that these clothes were rather "improper" in 2001 (8.0%). However, physicians, who wore casual attire in 2015 were more accepted by their patients (23.0%) as well as those, who wore formal attire 14 years ago. Even though most patients in this study preferred doctors, who wore white coats in terms of confidence with their physicians, good clinical practice is not only based on the doctorpatient relationship, but also on the benefit of patients, this being supported by scientific evidences.

To implicate this study into medical practice; reassuring patients in their confidence and preference towards their doctor the wearing of a white coat should always be considered as the first choice of attire. However, we could not, nor should we, jump to the conclusion that the "white coat" is the best attire for physicians, simply because many studies found "white coats" as a noteworthy reservoir of nosocomial infection. <sup>16,17</sup> In addition there is also the assumed, primary perception of "white" being a

physician's standard uniform, which in turn, denotes clean-liness in clinical practice. Hence, physicians should keep their white coats clean at all times, for example, changing them every day, or every time the coat is contaminated or not looking pristine. For clarification: "A clean, white coat" may be a better solution than the term 'white coat', only.

#### Limitation

This study design was a cross-sectional and a self-report without a pilot study. Even though we had samples of pictures for each type of attire, definitions and the understanding of each type (white coat, formal and casual attires) may be individually different. Moreover, we had no profound question for any reason of preference and confidence. Additionally, we did not design a question to establish the level of the patients' medical knowledge, nor what they perceived as a cleanliness appreciation. Therefore, we could not presume that white coats are the best attire for Thai physicians since, patients' deliberations may consist of many confounding factors. Thus, some form of scientific evidence is needed to additionally be discussed with patients for their proper consideration.

For further studies on this topic; to be beyond a quantitative or simple poll, there should be a more qualitative method with more questions about the background medical knowledge of patients. And the next ones still need for more research on other areas within Thailand. Regarding the number of cultural contexts, Thai patient preference on any physician's attire may be different in other areas of Thailand, hence the need for further examination on this topic. Additionally, there are not only "white" coats, but also other uniforms worn by Thai physicians. which may identify different fields of expertise, or departments of said physician's such as; blue or pink for some emergency rooms and pediatric clinics. This issue should always be up-to-date, since this study showed significant alteration of results over the course of 14 years.

#### Conclusion

Most outpatients at Songklanagarind Hospital preferred both male and female physicians to a wear white coat on duty, whether during official or non-official hours. They reported that white coats generated a feeling of professionalism, reliability, knowledge and also had an influenced on therapeutic adherence. The second, selected type of dress was of that of formal attire for physicians during daytime hours. Although, very nearly none of them felt satisfied with physicians, who wore casual attire during day-shift hours, almost half of these patients could accept casual attire during night-shift hours, over the weekend or during holiday periods.

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