Optimal Physicians' Attire: Patients' and Physicians' Preference

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ABSTRACT

Background: The use of a white coat has been less popular in some countries due to the spread of healthcare-associated infection and changing doctor-patient relationship towards provider-patient relationship.
Objective: To identify optimal physicians' attire based on current preferences of both patients and physicians in Thailand.
Methods: This cross-sectional survey was conducted in a university hospital by distributing a questionnaire to 350 patients, 100 faculties and 100 residents during September to December 2010. The opinion on physicians' attire were rated as a 4-points Likert scale ranging from "strongly disagree" to "strongly agree". The attires which were rated "strongly agree" and "agree" from at least 75% of both patients and physicians were defined as "optimal attires", 50-74% were defined as probable optimal attires, less than 50% were defined as non-optimal attires.
Results: The response rate of patients, faculties and residents were 88.3%, 50% and 73%. The optimal attires included residents' uniform, short or long sleeved shirts, name tags, trousers, belts for males; trousers, skirts and blouses with conventional style and color for females. Suit was considered improper and neck tie was not compulsory. Patients favored white coat more than physicians. Most casual attires were not considered proper except athletic shoes for both genders in emergency situation and female sandals with conventional styles and colors.
Conclusion: The optimal attires based on patients and physicians' preference were generally formal. Suit and neck tie were not compulsory. White coat was more preferred by patients than physicians.

Keywords: Attire, physician, patient, preference

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INTRODUCTION

A doctor's attire has long been considered as an important role in establishing a good first impression for patients.[1,2] By the beginning of 20th century, the use of white coat had spread to most physicians. The white coat was firmly accepted as the "doctor's uniform"[3] as it improved the appearance of the doctor and presented him or her as more professional, scientific, hygienic and easily identifiable.[4,5]

In 2007, the British Government issued a new policy supporting a "bare below the elbows" dress code to prevent the spread of healthcare-associated infection. This guidance includes measures such as the use of short sleeves, no wristwatches or jewelry, and avoidance of tie and white coat.[6] Nevertheless there is no strong evidence to support that this policy can clinically minimize cross-infection.[7,8]

Currently, the doctor-patient relationship has been changing from medical paternalism towards provider-patient relationship and patient-centered medicine. Studies from New Zealand and Hawaii found that patients preferred physicians in less formal attire rather than a white coat.[9] On the contrary, in a recent study from 2,272 Japanese outpatients, most respondents still preferred the white coat.[10]

The preferred style of physician attire may depend on several factors such as setting of practice, work culture of the institution, perception of healthcare-associated infection, public perception[11] and age difference[12]. Though Thailand has an Eastern culture similar to Japan, the hot and humid climate and presence of more female physicians may influence attire preference. Thus, the purpose of this study was to identify optimal physicians' attire based on patients and physicians' preference. Furthermore, the details of attire such as clothes, footwear, hair style and accessories were also identified.

MATERIALS AND METHODS

This cross-sectional descriptive survey was approved by the Institutional Review Board (Certificate of Approval number 176/2010). A questionnaire was developed from open-ended questions regarding preferred physicians' attire collected from 30 patients, 28 faculties and 30 residents. The answers were grouped into clothes, footwear, hair style and accessories. Items with frequency of less than 2

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were excluded. The remaining 80-items were assessed in 10 patients, 10 faculties and 10 residents for validity by using LISREL and tested for reliability by using Cronbach -α and an adjusted questionnaire until Cronbach-α ≥ 0.8.

A survey was conducted on 350 patients, 100 faculties and 100 residents at Siriraj Hospital, a university hospital in Bangkok, Thailand, during September to December 2010. Participants were invited to take part in an anonymous, self-completion, opinion survey. Patients attending out-patient clinics were included. Patients of 18 years or older were invited to take part unless they were severely ill. Informed consent was obtained prior to distribution of the questionnaire.

Participants were asked to complete the questionnaire comprising of two parts. Part one was demographic information. Part two was the opinion on physicians' attire and detailed information such as dressing, footwear, hair style and accessories. A four-point Likert scale was adopted for this purpose, ranging from "strongly disagree" to "strongly agree".

All items in the questionnaire were then categorized into 3 groups as formal, semi-formal and casual attire. Definitions were modified according to our culture, climate and environment. Formal attire was defined as white coat, suit, name tag, closed shoes, shirt with tie for male, and skirt and blouse in conventional color and style for female.[12] Hair style should be short haircut for male and short haircut or long with gathered hair for female.[13] Semi-formal attire included such items as trousers and shirt without tie for male, trousers and shirt, or dress above the knees but longer than a mini for female.[13] Casual attire was defined as jeans, T-shirt, mini-dress, shorts, blouse with no sleeves, tight clothes, long earrings, red lipstick, athletic shoes, sport socks and sandals.[11]

Statistical analysis

Demographic data were analyzed by using descriptive statistics. A four-point Likert scale for opinion was categorized into a nominal scale (proper for strongly agree and agree, improper for disagree and strongly disagree) and presented in percentages.

Items which were considered proper by more than 75% of both patients and physicians were determined as "optimal attire". Those which yielded 50-75% of both groups were determined as "probable optimal attire and those which yielded less than 50% of both groups were determined as "non-optimal attire". In addition, all items were ranked and shown from both patients' and physicians' perspective.

RESULTS

The responses comprised of 309 patients (88.3%), 50 faculties (50%) and 73 residents (73%). Table 1 showed sex and age groups of patients and physicians. Physicians were divided into faculties and residents. A majority of patients and residents were female. Patients' age groupings were similar between younger age group (18-40 year old) and older age group (>40 year old), but the majority of physicians' ages from both faculties and residents, were in the younger age group. Regarding habitat of patients, fifty-one percent lived in the capital city.

Proper dressings, footwear, hair styles and accessories were rated by at least 75% of patients and physicians and also assigned ranking as in Fig 1,2,3. The top ranking of dressing included the residents' uniform (white, short sleeved shirt with name tag), short or long sleeved shirt, name tag for both genders, trousers, belts, patterned tie or no tie (for males), skirts and blouses with conventional

Fig 1. Ranking of optimal dressing.

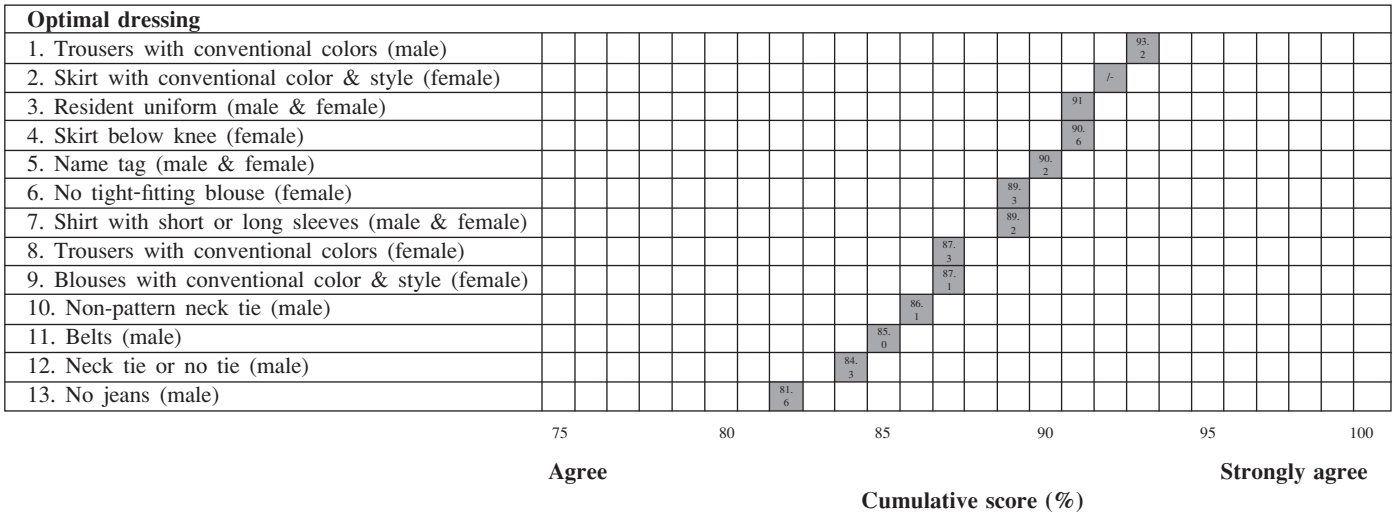


Fig 2. Ranking of optimal footwear.

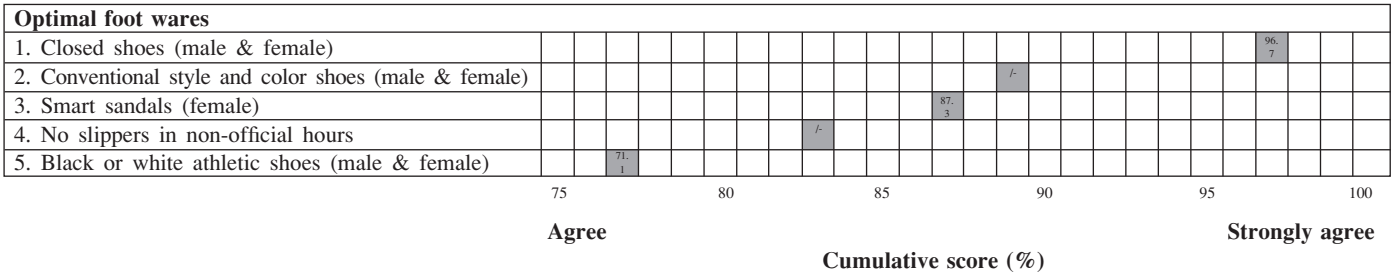
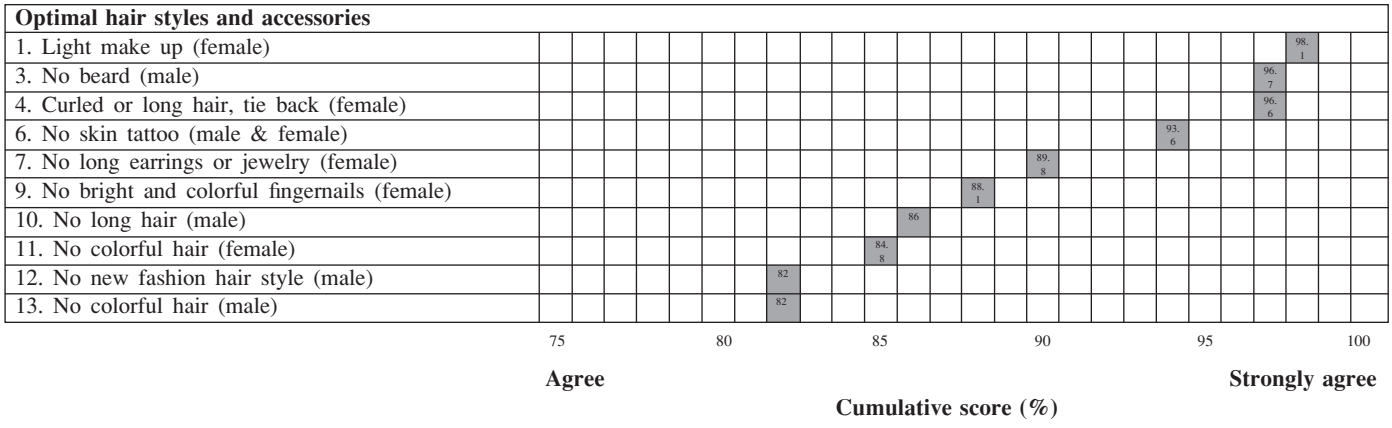


Fig 3. Ranking of optimal hair styles and accessories.



style and color or trousers for females.

The top ranking of footwear included closed shoes, black or white athletic shoes for both genders in emergency situations and smart sandals for females. Regarding hair style and accessories, top ranking included short hair-cut for male; short hair-cut or long hair with tied back, light make up, with no long earrings for female and no bright colorful hair for both genders.

The proportion of patients and physicians (faculties and residents) who agreed with each item of formal, semi-formal and casual attire were subsequently shown in Table 2,3,4. A majority of patients and physicians selected formal attire except that suit was not proper, and neck tie was not compulsory. Ninety percent of patients favored white coat whereas 67% of physicians did.

Regarding semi-formal attire, shirt without neck tie in male and trousers in female were rated proper. Physicians favored long hair more than patients. Short or mini skirt, skirt with colorful and too modern style were not accepted. Thirty percent of patients and faculties' accepted wearing of T-shirt or sleeveless top covered with white coat whereas 67% of residents preferred otherwise.

Finally, most items of casual attire were not considered proper, except athletic shoes for both genders in emergency situations and conventional colors and styles of sandals for female.

DISCUSSION

In our study, the preferred attires of Thai patients and physicians were mostly formal except suit. White coat was one of the more favored attires from the patients' point of view. Some semi-formal attires, such as shirt without neck tie in males, trousers in females and athletic shoes for both genders in emergency situation (including a casual items such as smart sandals for females) were accepted by patients and physicians.

Based on our culture, patients overwhelmingly favored professional attire with white coat for physicians similar to a Japanese study.[10] Our findings indicated long sleeved shirt, trousers, neck tie, white coat and closed shoes for males and skirt, conventional blouse, white coat and closed shoes for females as in Western culture.[14,15] The results also demonstrated optimal attires which were modified with climate, work culture, setting of practice and public perception. Residents' uniform and short sleeved shirt without neck tie did support a British policy of "bare below the elbow" dress code to prevent transmission of hospital-acquired infection via white coat, tie, wristwatches and jewelry. Recent studies from United Kingdom recommended surgical scrubs for in-patient situation and formal attire during out-patient encounters.[16,17]

Athletic shoes and female trousers were not accepted as professional attire by physicians in our country and even in Western countries before 1990.[13] Now, public perception has changed and these attires have been considered optimum especially in emergency and critical settings.

Our findings indicated respondents' negative viewpoint about most items of casual attires. These were similar to studies from several countries such as New Zealand[9], Japan[10], United Kingdom[13] and United States.[14] However, it was remarkable that residents preferred casual dress such as T-shirt or non-sleeved top covered with white coat than faculties and patients. This might predict a changing trend

TABLE 1. Demographic data of respondents.

Variables	Patients (n=309)		Physicians			
			Faculties (n=50)		Residents (n=73)	
	N	%	N	%	N	%
Sex						
Male	88	28.5	32	64.0	25	34.2
Female	190	61.5	16	32.0	41	56.2
Missing	31	10.0	2	4.0	7	9.6
Age						
18 - 25 year old	28	9.1	0	0	6	8.2
26 - 40 year old	116	37.5	28	56.0	55	75.3
41 - 60 year old	105	34.0	11	22.0	1	1.4
>60 year old	26	8.4	0	0	0	0
Missing	34	11.0	11	22.0	11	15.1

TABLE 2. Patients' and physicians' preference on formal attire (%).

Formal attires	Physician (n=123) All N=123	Faculties N=50	Residents N=73	Patients N=309	Degree of optimum
Shirt with short or long sleeves (male & female)	89.1	85.7	91.4	89.2	++
Resident uniform (male & female)	92.2	91.1	92.9	90.5	++
Name tag (male & female)	77.3	76.9	75.7	95.3	++
Trousers with conventional colors (male)	96.6	92.0	100	91.8	++
Neck tie with conventional, no cartoon pattern (male)	84.2	76.6	89.6	86.8	++
Belts (male)	83.0	91.1	77.6	85.8	++
Skirts below knee (female)	91.6	98.0	87.0	90.2	++
Skirt with conventional color and style (female)	97.4	98.0	97.1	90.3	++
Shoes with conventional styles and colors	96.6	95.9	97.1	86.2	++
Closed shoes (male and female)	97.5	98.0	97.1	96.3	++
Sandals with conventional style and color (female)	94.0	93.8	94.1	84.6	++
Long or short, neat and clean hair style (male)	86.4	91.8	82.6	73.8	++
Light make up (female)	99.2	100	98.5	97.7	++
Neat and clean hair style (female)	100	100	100	96.7	++
Curled or long hair with tie back (female)	86.3	100	93.9	96.6	++
White coat (male & female)	67.2	61.2	71.4	90.5	+
Conventional color blouse or shirt (male & female)	68.1	66.0	69.6	80.4	+
Conventional pattern blouse or shirt (male & female)	76.9	84.0	71.8	63.3	+
Dress with conventional style (female)	82.8	74.5	88.4	66.0	+
White shirt (male & female)	23.1	22.4	23.6	54.9	-
No sleeves shirt or blouse, T-shirt covered with white coat (male & female)	52.9	31.9	66.7	30.0	-
Suit (male & female)	42.9	34.7	48.6	42.8	-
Non-patterned neck tie (male)	31.0	33.3	29.4	70.6	-
No sleeves blouse with white coat (female)	50.0	34.7	60.9	29.6	-

++ = optimal attire, + = probable optimal attire, - = non-optimal attire

of doctors' attire in the future to be more casual.

There were some limitations in this study. First, we conducted this study in a single university hospital, in the capital city, which is an urban area. It might not represent the preference of patients and physicians in rural areas and other regions of the country. Second, physicians in this study were faculties and residents in a public hospital, and their opinions might be different from service staff or staff in private practice. Third, the result might be different in different age groups, for example, teenagers may like jeans more than the elderly. Finally, our questionnaires were text description based, not photographs, and thus the meaning of some attires in responder's imagination might not be similar. Further studies are recommended in multicenter hospitals in all regions of the country and among various socioeconomic patients.

CONCLUSION

In conclusion, formal attires were preferred by both patients and physicians. Patients favored white coat more than physicians. However, some semi-formal attires are increasing in popularity.

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TABLE 3. Patients' and physicians' preference on semi-formal attire (%).

Semi-formal attire	Physicians, n=123 All N=123	Faculties N=50	Residents N=73	Patients N=309	Degree of optimum
No tie (male)	93.1	88.0	97.0	80.5	++
Trousers with conventional color and style (female)	87.7	78.7	94.0	87.2	++
Long hair (female)	86.3	84.0	88.1	66.0	+
Skirt above knee but not mini-skirt (female)	57.6	46.9	65.2	56.1	+
Modern and colorful skirt (female)	62.2	56.3	66.2	55.2	+

++ = optimal attire, + = probable optimal attire, - = non-optimal attire

TABLE 4. Patients' and physicians' preference on casual attire.

Casual attire	Physicians, n=123			Patients, n=309	Degree or optimum
	All N=123	Faculties N=50	Residents N=73		
Black or white athletic shoes (male & female)	76.1	75.0	76.8	77.5	++
Polo shirt (male)	57.4	51.1	61.4	57.1	+
High heel slippers (female)	52.6	44.7	58.2	54.5	+
Jeans (male)	12.5	12.0	11.6	21.2	-
Sport trousers (male)	11.8	14.3	11.3	29.9	-
See-through, tight-fitting blouse (female)	4.3	6.0	3.0	13.2	-
Slippers (male & female)	16.9	8.3	22.9	17.2	-
Skin tattoo (male & female)	4.3	2.0	6.0	7.2	-
Contact lens with colors or big eyes (male & female)	38.7	34.8	41.5	25.8	-
Modern-fashion hair style (male)	16.8	14.3	18.6	18.5	-
Long hair (male)	17.8	16.7	18.6	12.5	-
Colorful hair (male)	23.3	27.1	20.6	15.8	-
Heavy make up (female)	43.5	36.6	47.8	23.6	-
Colorful fingernail (female)	14.2	10.9	16.4	11.0	-
Colorful hair (female)	5.2	8.2	3.0	19.2	-
Long earrings, big necklace	12.3	6.1	16.9	9.4	-

++ = optimal attire, + = probable optimal attire, - = non-optimal attire

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