

Research Article

Guess Who? How Doctors' Attire Affects Students' Perceptions of their Speciality

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ABSTRACT

Background: The unacknowledged learning at medical school includes the comprehension of the traits, mannerisms, and professional behaviours adopted by the specialties of modern day medicine. The present study aimed to determine the extent to which doctors' attire influence medical students' ability to: a) identify specialties and level of training b) decipher which speciality is perceived as the most professional, trustworthy and fashionable; and c) decide whom they aspire to be like.

Methods: A cross-sectional survey was administered to 100 Fourth-Year Medical students at University College London (UCL) Medical School in a single sitting. The response rate was 79% (79/100).

Findings: Acute care common stem doctors (ACCS), who were all wearing uniforms, were the most recognisable (66%), suggesting that uniforms add clarity to the role of the doctor. Paediatrics was the least recognisable speciality (13%). Consultants and trainees were only correctly identified 45% and

53% of the time, respectively. The doctors perceived to be most fashionable were Obstetricians & Gynaecologists (female) and Psychiatrists (male). Students were more likely to aspire to be like the doctors who they identified as most trustworthy. 76% thought that the people in suits were surgeons. None of the female doctors in their personal work attire were identified as being surgeons.

Discussion: Medical students' perceptions are influenced by stereotypes depicted through doctors' attire. This could be an important influencing factor in career choices. Educators should consider acknowledging and opening a dialogue with medical students around this topic. Tackling these stereotypes developed early on in medical training is especially important for 'difficult to recruit' specialities, such as emergency medicine and psychiatry.

MeSh Headings/ Keywords: Clothing; Infection control—methods; Doctors; White coat; Trust; Perceptions; Medical students

Abbreviations

ACCS: Acute care common stem

O&G: Obstetrics and Gynaecology

GP: General Practitioner

Introduction

Hippocrates said that a doctor should be “clean in person, well dressed, and anointed with sweet-smelling unguents” [1]. Until the late 19th century, doctors often wore black. Black clothing was considered “formal wear,” not least because calling the doctor was often the last resort prior to death [2]. The dress code changed when, in the latter part of the 19th century, the idea of antiseptic

techniques emerged [3] leading to a move towards “cleanliness” and “purity”, reflected in the now iconic white coat.

In 2008, in the UK, the white coat was officially removed as part of a doctor's “uniform” following governmental investigation into health care associated infections, such as *Clostridium Difficile* and Methicillin-Resistant *Staphylococcus aureus* (MRSA) [4]. The government was keen to demonstrate to the public they were addressing infection control, with the removal of the white coat symbolising this change. Doctors were also asked not to wear ties, watches or jewellery in hospital and to roll up their sleeves or wear short-sleeved clothing. It was stated that this was not only for infection control purposes but also to “permit patients to identify clinical staff on the wards as well as ensuring good communication and delivery of care” [5].

There was perhaps an implicit understanding of trust and confidence in a doctor, which the white coat generated. Since its demise there have been a number of discussions around the effect of a doctor's attire on the opinion held by patients and the public. Studies have shown that patients overwhelmingly favour doctors in professional attire, compared to informal wear, [6] and it has been suggested that the doctor's clothing forms part of the patient-doctor relationship [7].

Interestingly, it is not only the public who have an opinion about the effect of a doctor's attire. In a profession where there has been a long-standing historical rivalry between specialties, stereotyping by medical students is rife. For example, the hippy alternative psychiatrist, the dressed down GP, and the 'Glamazon' dermatologist, to name a few [7]. These perceptions have a powerful, and often subconscious, effect on role modelling in medical education, which has been highlighted as an important teaching and learning strategy [8].

The purpose of this study was to determine:

- Whether medical students were able to identify specialties based on their work attire;
- Which speciality was viewed as the most fashionable, trustworthy and aspirational;

- Whether there were any patterns to indicate that medical students stereotype specialties based on dress.

Method

To obtain photographs of doctors for the study, we recruited trainees and consultants from seven different specialties working across 11 trusts in the UK. Contact was made through phone and email to the differing departments, and those who agreed to participate were asked to submit a digital picture of themselves at work and a consent form agreeing to participate in this study and have their photo in the subsequent publication. Our study was considered exempt from ethics approval following a review by the UCL ethics coordinator. Of the 24 doctors who were recruited and photographed for the study, there were four General Practitioners (GPs), four general medical doctors, four psychiatrists, three surgeons, three paediatricians, three Obstetricians and Gynaecologists (O&G) and three Acute care common stem (ACCS) doctors. Thirteen of the photographs were of consultants and 11 were of trainees. The number of males and female participants was equal. The pictures of the doctors were randomly arranged and their face was anonymised with a black box (Figure 1).

A paper survey (Box 1) was then distributed to 100 fourth-

Can You Guess The Speciality?



Figure 1: Example quiz images.

year medical students at University College London Medical School. The survey gathered basic demographic information, asked medical students to identify which speciality each doctor belonged to, and select one person they would most trust to be their doctor. The survey also included questions asking which person the student felt was the most professional, most fashionable, who they would like to be on a placement with,

who they most aspired to be like and which speciality they planned to go into themselves. There was a free text box for any additional comments.

All data management and analysis was completed using Stata 13. For each photograph the proportion of medical students who correctly identified the doctor's speciality was calculated and grouped by speciality. Spearman's rank correlation coefficients

Box 1: Survey questions distributed to students.

What speciality do you think this doctor is AND what grade are they?

(Respondents were asked to tick speciality and grade for each Picture from 1-24.)

PICTURE 1-24

Speciality:

Medicine Surgery Obs & Gynae Paeds Psychiatry
 ACCS GP

Grade:

Consultant Trainee

What do you think of...

(Respondents were asked to pick a single Picture to answer the following questions.)

- Who do you think looks the most professional?**
- Who do you think is the most fashionable of the women?**
- Who do you think is the most fashionable of the men?**
- Who would you most like to be on a placement with?**
- Who would most aspire to be like?**
- Who would you trust to be your doctor?**

A few details about you:

(Respondents ticked one demographic category per question.)

Your gender: Male Female

How would you describe ethnicity?

- White british
- White Other
- Asian/Asian British
- Black/ Black British- Caribbean
- BlAck/Black Brotosh- African
- Chinese
- Mixed- white/black
- Mixed- White/Asian
- Other

What is your age?

- 18-24**
- 24-34**
- >34**

What speciality would you like to do?

(Respondents were asked to tick specialities they are considering.)

- Medicine
- Surgery
- Obstetrics & Gynaecology
- Pediatrics
- GP
- Psychiatry
- ACCS
- (A&E/Anesthetics/Acute)
- Radiology
- Other- please specify: _____

were calculated to examine associations between perceived characteristics and medical student preferences. The material generated from the free text comments was analysed using a thematic analysis and a coding frame was developed.

Results

Seventy-nine of the 100 students approached completed the survey; 48% were male and the majority (86%) were aged between 18 to 24 years. 46% described their ethnicity as White British, 19% as Asian British, 10% as Asian other and 9% as Chinese.

The most popular specialties that students aspired to go into were Medicine (30%), Surgery (29%), General Practice (12%) and Paediatrics (11%). The least popular specialties were Psychiatry (4%) and Public Health (1%). ACCS was the most recognisable speciality (66%) (Table 1). Around half of the medical students correctly identified the speciality of the Surgeons and GPs. The least recognisable speciality was Paediatrics (12%). O&G were rated the most fashionable out of the female doctors and Psychiatrists were voted the most fashionable out of the male doctors (Table 2).

Table 1: Proportion of medical students who correctly identified the doctors' speciality from the photograph.

Speciality (n=24)	Proportion of participants who correctly identified the doctor's speciality from the photograph (%)
Medicine (n=4)	28.5
Surgery (n=3)	51.9
Pediatrics (n=3)	13.3
GP (n=4)	48.1
O&G (n=3)	24.1
ACCS (n=3)	65.8
Psychiatry (n=4)	44.3

Table 2: Most fashionable, professional, aspirational, trustworthy, to be on placement with.

Speciality	Most fashionable female (%)	Most fashionable male (%)	Most professional (%)	Who would you aspire to be like (%)	Who would you trust to be your doctor (%)	Who would you like to be on placement with (%)
Medicine	11.4	15.2	1.3	3.8	3.4	8.9
Surgery	15.2	5.1	22.8	8.9	2.5	6.3
Paediatrics	13.9	7.6	12.7	8.9	7.6	8.9
GP	7.6	13.9	6.3	11.4	8.9	11.4
ACCS	3.8	2.5	12.7	10.1	6.3	8.9
Psychiatry	3.8	37.9	2.5	10.1	5.1	38.4
O&G	43	11.4	41.8	37.9	51.9	17.2

Table 3: Correlation between perceived characteristics.

	Fashion (M)	Fashion (F)	Most Trusted to be your doctor	One you would like to be on placement with
Aspire to be like	-0.06	-0.05	0.35*	0.35**
Trust	-0.07	-0.2	-	0.22*
Want to be on placement with	0.05	-0.1	-	-

Spearman rank correlation coefficients: *p=0.05, **p<0.01

Students identified O&G as the most professional looking, those they would trust to be their own doctor and those they most aspired to be like. Both male and female trainees were most likely to aspire to be like doctors who appeared most trustworthy (in terms of dress sense) (Spearman's rank correlation coefficients 0.35). Trainees also wanted to be on a placement with those they would trust to be their own doctor (Spearman's rank 0.35) (Table 3).

Consultants and trainees were only correctly identified on average 45% and 53% of the time respectively. O&G and ACCS were the easiest to identify speciality hierarchy, 65% and 62% respectively.

Of all respondents, 76% thought that the male doctors in suits (Figure 1: Pictures 14 and 19) were surgeons. Only female doctors wearing scrubs were identified as surgeons by the medical students. 47% thought that the doctors dressed more flamboyantly (for example wearing a waistcoat (Figure 1: pictures 5, 6 and 12) were psychiatrists. None of the male doctors were identified as working in O&G.

The medical students who had said they wanted to pursue careers in O&G and Public Health had the highest scores in matching the specialties with the correct doctors (both 37.5%). However, considering there was a relatively narrow spread of results (30.1-37.5%), there was no discernible difference in the perceptiveness of medical students based on their career aspirations.

Qualitative results

There were sixteen free text box comments. These results were organized into three thematic sections.

Professionalism: Twelve people commented that doctors should be smart and presentable in the workplace. In particular, two people said that male doctors should be clean-shaven with no piercings. Another person commented that there should be no facial concealment. Most said that being smart was a

means of gaining respect in the workplace. Three male students wrote that women doctors in their experience were too casual when attending the wards and they felt this was noticeable and therefore didn't identify them as doctors. Six associated looking professional as a means of developing trust and strengthening the doctor-patient relationship.

P17 "They should be smart and easily identifiable. It gains respect. It is often too casual. Consultants should wear suits or white coat, for men"

Uniform: Seven people questioned whether doctors should wear uniforms in hospitals like nurses so that they were readily identifiable as doctors. They also made comments about how to make medical students more identifiable to patients for example- short white coats and/or name badges.

A new awareness: Four people commented on the questionnaire as being thought provoking, making them reflect on their own attire and what this may represent to the patient. Three people wrote that the questionnaire made them consider their own perceptions regarding attire and different medical specialities.

P34 "doing this questionnaire was a really interesting exercise. It suddenly made me aware of the assumptions I must have about different specialities, which I hadn't really thought about before".

Discussion

ACCS doctors were the most recognisable to the medical students. These doctors were frequently dressed in scrubs, suggesting a uniform could be linked to doctors being more identifiable. Surgery was the next most correctly identified speciality, though only those who were male and wearing a suit were thought of as being surgeons. The lack of identification of any male doctors as being O&G and females dressed in their own work attire as being surgeons suggests a gender bias in the consciousness of current medical students, with surgery still perceived as a traditionally male speciality and O&G as a female speciality. Similar findings were demonstrated by interviews of medical students, which show that despite the diversification of the British medical student population, gender stereotypes exist [9].

O&G seemed to fare well as they were identified as the most fashionable (female), most professional looking, the one most trusted to be their doctor and the one that students felt they would aspire to be like. There is much literature of a doctor's attire in general and in keeping with those previous studies [9], our research confirms that medical students have a preference for doctors who look professional in their attire. However, as far as we are aware this is the first study looking at the perceptions of British medical students.

Medical students believe that looking professional is an integral part of gaining patients' trust. They also feel it's important for doctors to be easily distinguished from patients and other health care staff in the work place.

There were several limitations to our study. Our sample size was small and students were based at a single central London medical school, which may not be typical of the national population. Whilst all pictures were taken in a work

environment, they were not uniform in terms of background and standing posture, which may have influenced the students' views. The doctors who were recruited to be in the questionnaire were volunteers and as such not standardised in terms of other characteristics such as age, body habitus, or ethnic background.

Only sixteen people wrote in the free text boxes so we were only able to capture limited qualitative data. Further research is required to explore this important topic. A larger survey and focus groups would allow more detailed analysis of medical students' perceptions of doctors' attire.

This study provides an insight into how doctors are judged based on their appearance by future colleagues. It suggests that gender stereotyping still exists and that clothing may alter how doctors are perceived in terms of personal attributes. These stereotypes develop during early stages of training and have the potential to influence the educational impact of placements and medical students' career choices. Educators should consider acknowledging and opening a dialogue with medical students around this topic. In particular, challenging the negative psychological processes that stereotypes can have on medical students is crucial to challenge 'BASH', or badmouthing, attitudes and stigmatisation in healthcare experienced by hard to recruit specialities such as psychiatry and emergency medicine [10,11].

Competing interests

We have read and understood policy on declaration of interests and declare that we have no competing interests. Golnar Aref-Adib affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

Authors' contributions

DO, SS, GA, JH, and EA contributed to study design. GA and SS recruited the doctors for the photographs. GA and SS distributed and collected the survey data from the participants. JH, NW and PD led the analysis of study data. GA, SS and EA also analysed the data, with contributions from SS, EA and DO. GA and SS wrote the draft of the paper and this was revised and approved by DO, JH, EA and NW. All authors approved the final manuscript.

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