Editor's Spotlight/Take 5

Editor's Spotlight/Take 5: Physicians' Attire Influences Patients' Perceptions in the Urban Outpatient Orthopaedic Surgery Setting

Seth S. Leopold MD

The idea that doctors should maintain a professional appearance is not new. Some 2300 years ago, Hippocrates suggested that a physician “must have a clean appearance, and wear good clothes, using a sweet-smelling scent, which should be a totally unsuspecting perfume. This is pleasant when visiting the sick” [4].

Most hospitals and doctors' offices now recommend against physicians wearing scents, suspicious or otherwise, so as not to cause respiratory distress among patients with chemical sensitivity. But the question of how to cut a

professional appearance remains as important today as it was in 320 BCE. If a professional community sets attire standards for its trainees, that community must consider attire a key element of professionalism. In surgery, the issue of professional attire consistently comes up [10, 13]. The question is, what kinds of attire are most appropriate for a surgeon?

The default position is the once-ubiquitous white coat. The language associated with its use—and the ceremonies at medical schools associating the white coat with professionalism—border on reverential [7]. In fact,

the white-coat ceremony itself has been described as a means to promote professionalism [12].

But there also are many reasons not to like the white coat. While “white-coat” hypertension probably is more about the anxiety-provoking setting than it is about the garment, the coat itself does appear to cause anxiety in certain populations [5]. Many studies have suggested that the coats themselves, which typically get washed slightly less often than a teenager's blue jeans, can spread infection [1, 14]. For that reason, the Society for Healthcare Epidemiology of America recommends laundering them daily or taking them off before seeing patients [8], though there is some evidence that any garment that spends more than a few hours in a hospital will be colonized with the local flora [2]. Doctors themselves often don't like white coats, typically because of concerns about infection [3].

Long before the concerns about bacterial colonization, there were concerns about public relations. Indeed, the origin story of the doctor in the white coat is less about professionalism, and more about fooling the public. Physicians began wearing

Note from the Editor-In-Chief: In “Editor's Spotlight,” one of our editors provides brief commentary on a paper we believe is especially important and worthy of general interest. Following the explanation of our choice, we present “Take Five,” in which the editor goes behind the discovery with a one-on-one interview with an author of the article featured in “Editor's Spotlight.”

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white coats in an attempt to try to spin a generally poor perception of our profession, which at the time (the late 19th and early 20th centuries) was well deserved, as medicine was riddled with quackery [6]. Having physicians appear as “real” scientists (by co-opting the most recognizable symbol of science, the white laboratory coat) appeared to address a problem, even as the actual problem remained unsolved. For that reason, I’ve never cared for them.

The problem is, patients do.

In this month’s *Clinical Orthopaedics and Related Research*[®], Christopher Haydel MD and his group at Temple University explored patients’ preferences for various kinds of professional attire, and also considered the interaction of gender and professional garb in a very thoughtful way. In short summary, the white coat came out on top.

In fact, orthopaedic patients in an urban setting preferred white coats across the board; white coats outperformed all other kinds of professional attire when the surgeon depicted in the photographic experiment was a man. Patients were equally accepting of women surgeons in white coats as they were of women surgeons in scrubs, but patients generally preferred white coats to business attire on women surgeons. The effect sizes were modest, but the elements of

professionalism explored here were exactly the type that all surgeons care about, including the ability to inspire confidence, trust, and a sense of safety among our patients. The fact that there should have been any gender differences at all in patients’ preferences for what their doctors wear in an experiment like this should cause us to ask other questions about the differential perceptions and expectations that remain between professional men and women.

The idea that some patient populations prefer doctors in white coats certainly is not new. Others have found that white coats inspire trust [9], that they make doctors easier to identify from among other hospital personnel (although this probably is not a reliable form of identification [3, 11]), and that older patients in particular seem to like them [3]. Patient satisfaction is what matters, and this study by Dr. Haydel’s team in this month’s *CORR*[®] represents the best orthopaedic-specific information we have on the topic.

Please join me as we explore professionalism, gender, and patients’ expectations of their caregivers in the *Take-5* Interview that follows.

And after you do, please share your thoughts: What do you wear to work? Why do you wear it? Send your letters to EIC@clinorthop.org.

Take Five Interview with Christopher Haydel MD, Senior

Christopher Haydel MD

Author of “Physicians’ Attire Influences Patients’ Perceptions in the Urban Outpatient Orthopaedic Surgery Setting”

Seth S. Leopold MD: *Congratulations on this fascinating and thought-provoking work. What surprised you most about your results?*

Christopher Haydel MD: We really appreciate the invitation to participate in the *Take-5* Interview. I would like to thank my coauthors Dr. John Jennings, Sophia Ciaravino, and Dr. Fredrick Ramsey for their hard work on this project. We were surprised that the white coat was most preferred. When walking through our hospital, one commonly sees nonphysician

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employees wearing white coats; patients encounter so many caregivers wearing white coats, and so it seems possible they might become confused as to who is their doctor. Another surprise was that scrubs outperformed business attire. During my residency, business attire was mandatory when delivering care outside of the perioperative area of the hospital or when not on call. While many of my colleagues believe that business attire is most appropriate in the outpatient office, our patients do not seem to share that sentiment.

Dr. Leopold: *This paper pushes all sorts of buttons—one certainly is the issue of “style versus substance.” The fact that someone looks like (s)he can be trusted with confidential information does not mean one should hand over one’s bank card, and that someone seems skillful or caring does not mean (s)he is. To what degree should we be troubled that so much professional credibility appears to hang on something as superficial as one’s coat?*

Dr. Haydel: We should not be troubled at all because appearance is only one of the many factors that determine our professional credibility. The study focuses on how patients perceive the surgeon by appearance but does not describe, at all, what happens to those perceptions during and after the encounter. For example, a patient may

have low confidence or trust because he or she may not prefer business attire. However, after speaking with the surgeon who is articulate, compassionate and knowledgeable, confidence and trust increase considerably. The opposite can also occur with a surgeon wearing a white coat with poor bedside manner and communications skills that negatively affect confidence and trust levels. Along with our appearance, how we act and what we know are just as important.

Dr. Leopold: *Another fascinating finding here was the difference in how patients perceived the women and the men surgeons in the photographs. The between-gender differences were not dramatic, but they certainly were real. What does this tell you, if anything, about differences in how patients see men and women surgeons? Does this suggest any deeper differences in terms of what patients expect from women surgeons as opposed to men?*

Dr. Haydel: The white coat was preferred across the board for male physicians, whereas an equal preference for white coat or scrubs was observed for female physicians, which was indeed an interesting finding. While our study only addresses attire, this difference may unmask other underlying patient perceptions with regard to physicians based on gender.

Unfortunately, our study was not designed to identify the reason for this difference and further studies examining this particular topic are certainly needed.

Dr. Leopold: *The doctors in the photographs looked young to me (though I acknowledge that maybe I am just getting old). To what degree does a symbol of our profession—the white coat—help to offset the apprehensions that patients, especially older patients, might have about their caregivers simply being “too young”? What role does age play here—either of the patient, or of the individuals depicted in the experiment?*

Dr. Haydel: As a relatively “young” physician myself, this is something I do encounter, where every once in a while a patient will ask me my age or say that I look “young for a doctor” despite me wearing a white coat. That, of course, is the patient’s first impression of me based on appearance. While the importance of the first impression has been well established, effective communication skills, knowledge, and compassion go a long way to developing the patient-physician relationship in the long-term. The age of the patients plays a role too, as previous studies have suggested that younger patients seem to be more accepting of scrubs as appropriate attire. This, in part, may be the result

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of how surgeons are depicted on modern television shows, movies, or on social media. The individuals depicted in the experiment were indeed young, but were held constant across all of the images. We would be interested, however, to find out if replicating the study with older pictured physicians would produce different results.

Dr. Leopold: *I've always found it somewhat ironic that this symbol of our profession—the white coat—began in part as something that was, if not outright fraudulent, at least a slick sort of marketing [6]. Today, if one attends a white-coat ceremony, one hears laudatory language, tying the symbol of the white coat to our best professional values [7], and little or nothing of its shady past. How do you see it?*

Dr. Haydel: As referenced in the article on the history of the white coat, doctors used to wear black in the form of formal attire. Medicine, at that time, was not based on established science and often was a last resort. The shift from black to white came with the idea of antisepsis and interventions based on scientific research. As I see it, the white coat became a symbol of the rebirth of medicine representing the professional values mentioned in white-coat ceremonies today. The results of our study suggest that this sentiment is what carried through time

and is likely the reason patients associate the white coat as a symbol of professionalism, respect, intellect, hygiene, and care. Interestingly, some argue that business attire now carries many of these same values, which is why we were curious about this comparison in our study, however, it seems the archetypal value of the white coat is stronger.

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