

# Wearing White—Right or Wrong? A Satirical Analysis of Medical Attire

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Physicians wear white coats. In many medical centers, the length of one's coat grows with seniority; medical students, interns, and residents wear short white coats, while attending staff graduate to long white coats with their names embroidered on the front. This traditional uniform serves a similar role to the stripes on a military sleeve. That is, by examining the length of a person's coat, a nurse or other hospital employee can rapidly determine the seniority, and theoretically the increased medical knowledge, of the person inside.

Of course, it isn't quite this simple. In many places, all residents wear long coats (with embroidered names). In other hospitals, attending staff wear short coats. The problem of distinguishing between a medical student, resident, and attending physician can be quite vexing, particularly after the summer months when the anxiety visible on the faces of new house staff and third-year medical students fades away into the more seasoned look of fatigue and malaise. As hospital-based practitioners, what are we to do?

To be certain there are clues one can use to identify one's "rank" in the medical profession. Often medical students wear a medical school pin bestowed upon them at a "robing" ceremony or other coming-of-age festivity to mark the transition to the clinical training years.<sup>1</sup> (Little do they know that the primary utility of such adornments is to mark them, as though with a scarlet letter, for easy identification when one wishes to "pimp" the medical team.)<sup>2</sup> Similarly, one can look for an arm patch. Just as a mother hen has the need to identify her own chicks, so too is it helpful for the residency director to have each of his or her own residents easily identifiable by the residency patch emblazoned upon the arm of their (long) white coat. The "patch test" can fail, though, for too often the residency emblem is merely a simple modification of the hospital or medical center logo, and thus not easily distinguishable.

When all else fails, of course, you can look to the pockets. As one's medical knowledge and training rank increases, the number of papers, pens, and instruments in the pockets of the white coat decreases. This inverse relationship provides some increased ability to identify medical students and junior house staff. For example, a short white coat, busting with oversized index cards held together by a large metal ring, several tattered and folded journal articles, and a worn spiral-bound text suggests a medical student or intern. If they have an electrocardiogram (ECG), calipers, and tuning fork visible, safe bet is you've found a medical student. Conversely, if the white coat sports several "free" pens (with

medication logos embossed on their stems) and has more than a few stains, chances are you've spotted an intern.

Unfortunately, none of this is of much utility in identifying a physician, as the initial premise that "physicians wear white coats" may be false. The problem is 2-fold. First of all, not all physicians wear white coats (or any coat for that matter), and, many nonphysicians wear white coats. Commonly, phlebotomists, pharmacists, and respiratory technicians wear white coats; long white coats, in fact. So do nutritionists, speech pathologists, the clerk at the radiology file room, and even the cashiers in the cafeteria. And why not? Each of these persons has an important role to play in the operation of a modern medical center. The long white coat serves as professional uniform to identify the wearer as contributing to the mission of the medical center. It engenders confidence and suggests cleanliness and purity.

The problem remains, however, what should I, as an attending physician wear? You see, patients encounter so many persons in their visits to the hospital that it is not clear who their doctor is. (It's not statistically likely to be the man in a long white coat.) Being able to identify the attending physician is important. The attending physician is ultimately responsible for the patient's care.

There are many guidelines for how to dress. For example, don't wear white after Labor Day. The pleats on a cummerbund point so that the folds open pointing up (apparently it was originally meant to serve as a ticket holder, perhaps in the days before pockets?). Match your belt to your shoes. The list goes on. However, physicians are not commonly associated with natty attire, so fashion help for the MD is hard to find, though nonetheless necessary.

Even wearing white is questionable. White robes have been associated with purity and sanctity for centuries. Religious leaders have donned white for spiritual cleansing of their communities on the most holy of days. I like the idea of appearing pure and holy. Of course, I don't want to mislead anybody, either.

Brides have traditionally worn white dresses. But, while many believe this is to convey a sense of premarital purity, more likely the tradition stems from an ancient Roman practice of wearing white as a symbol of joyous celebration. Interestingly, in some parts of Asia, people at a funeral wear white while the deceased is dressed in red.

In some environments, the culture of the medical center prescribes appropriate apparel. The Mayo Clinic in Minnesota, for example, has had a tradition of having their physician staff dress in business attire. By this, they mean

conservative sport coats or suits with ties for men, and similar appropriate women's business clothing. As noted by Leonard L. Berry and Neeli Bendapudi in their article "Why Docs Don't Wear White Coats or Polo Shirts at the Mayo Clinic"<sup>3</sup> in the Harvard Business School publication *Working Knowledge for Business Leaders*, while some may consider this semiformal business dress "pretentious," it should be considered "no more pretentious than, say, the dress code for airline pilots. Airline passengers don't want to see their pilot in a polo shirt, and patients feel the same way about their doctors." The business attire is a "uniform; it's a visible clue that communicates respect to patients and their families." But, isn't a white coat a uniform that conveys respect? Perhaps a white coat isn't safe if the physician wants to stand out to oncoming traffic in his snowy Minnesota environs.

Besides, is it true that patients don't want their physician to wear a polo shirt? Perhaps casual dress will break down 1 of the patient-doctor barriers to communication and allow for improved comfort with greater honesty in patient-physician interactions? Prior to designing a prospective controlled randomized trial to answer this question myself, I reviewed the available literature.

It turns out, that an evaluation of polo-shirt-wearing physicians has been carried out. Drs. Barrett and Booth<sup>4</sup> from the Birmingham Maternity Hospital in England questioned 203 groups of parents and children (406 individuals) about various levels of physician dress. Seventy percent of participants thought that how the doctor dressed was important. Among children, a male physician in a polo shirt was considered more friendly and gentle than the male physician in a white coat (who did get points for being more competent and more concerned). Women physicians in T-shirts were also thought to be friendlier than if in a white coat, but similarly less competent. Parents were more likely to prefer casually-dressed physicians and were poor at predicting what their children would want.

So, a polo shirt makes me look friendly, gentle, and less competent? What about a polo shirt under a white coat—is that the whole package? What about business attire, as per the Mayo Clinic requirements? These questions remain unanswered. So, back to the literature.

In the *Journal of the American Medical Association*, in 1987, Dunn et al.<sup>5</sup> evaluated 200 medical patients in Boston and San Francisco regarding their preference for physician dress. Sixty-five percent believed physicians should wear a white coat, 27% said no tennis shoes, one-half said no blue jeans, and about one-third thought male physicians should wear ties and female physicians should be in a skirt or dress. I suppose the conclusion here is to wear a white coat with or without jeans and most of the time without a tie, though almost always with proper shoes, or at least without tennis shoes. (I practice in Boston and trained partly in San Francisco so this advice seems particularly valid for me.)

It may be more obvious what to do in Japan. Ikusaka et al.<sup>6</sup> evaluated the experience of patients at a university clinic seen by a consulting physician in either a white coat,

or "private clothes." To me, private clothes imply pajamas and a bathrobe, but we must assume this means some form of professional dress lacking a white coat. It turns out that 71% of the Japanese patients seeing a doctor in a white coat preferred a white coat, though more patients seeing a physician in a white coat (vs. "private clothes") felt tense during their consultation. The researchers stress that the presence of a white coat did not increase satisfaction with the consultation. They conclude, that while patients may say they prefer a white coat, maybe it would be better not to wear one since it makes patients feel tense.

In addition to feeling tense, white coats may cause hypertension. The phenomenon of elevated blood pressure when in the presence of the physician (or other hospital staff in a white coat) has been long documented. This "white coat hypertension" can be found in more than 15% of the population who have a measured blood pressure in the office of over 140/90 mmHg with normal daytime mean ambulatory blood pressure readings (when not around a white-coat-wearing stress-inducing medical worker).<sup>7</sup> Older adults, females, and nonsmokers were more likely to have white coat hypertension than other persons.

And yet, older adults prefer white coats. The Japanese study (Ikusaka et al.<sup>6</sup>) concluded that elderly patients prefer a white coat to other attire. Similarly, a study from the Royal Free Hospital, London, showed that white coats were twice as popular with patients as they were with physicians.<sup>8</sup> Specifically, patients found the white coats made doctors easier to identify. In an article by the British Broadcasting Corporation (BBC) on the subject, it was noted that the elderly largely preferred physicians in white coats, while children preferred physicians without white coats. British children must prefer a friendly doctor to a competent one.

The article further suggests that only 1 in 8 physicians wears a white coat, complaining that they are too hot and uncomfortable, and may carry the risk of transmitting infections. The white coat, the symbol of cleanliness and purity, a source of infection? To add hypocrisy to the equation, one-half of physicians who thought white coats should be worn admitted to never actually wearing a white coat. In fact, only 7 of 86 physicians surveyed wore their white coat on a daily basis. The BBC goes on to note that in Australia, "the white coat is gaining momentum as there seems to be a movement towards rediscovering the white coat as a symbol of purpose and pride as a profession."<sup>8</sup>

Really? Let's consult the literature! According to Dr. D.A. Watson,<sup>9</sup> "White coats have largely disappeared from Australian teaching hospitals and the majority of junior doctors in Australia oppose the wearing of white coats." In a survey of 337 junior medical officers, only 16% preferred to wear a white coat. Peer pressure seems to have something to do with this, as 70% say they don't wear a white coat because "nobody else wears a white coat." This is indeed a compelling argument.

Of course, a better argument against wearing a white coat may be that it causes tension (at least in Japanese

patients) and may cause white-coat-hypertension, resulting in the inappropriate diagnosis and treatment of elevated blood pressure. In Australia, however, it seems that wearing a white coat may make patients too relaxed. Wing et al.<sup>10</sup> noted that in 21% to 45% of elderly patients, blood pressure was atypically low when checked in the physician's office as compared to mean ambulatory blood pressure. This "reverse-white-coat-hypertension" could result in the omission of necessary blood pressure treatment.

In the United States, residents—our own version of the Australian junior medical officer—commonly wear scrubs covered by a white coat. Scrub clothes are typically available without charge from the hospital, limit the amount of laundry a busy resident needs to do, and can be put on with little concern as to pressed pleats or matching colors. The overlying white coat adds a moderate degree of formality to what could otherwise be mistaken as pajamas, while providing convenient pockets for the aforementioned papers and miscellaneous equipment and souvenirs. This outfit is likely one of practicality rather than a desire to be most appealing to patients. But, what do you know? It seems that patients prefer their resident physicians to dress this way. Dr. A. Cha et al.<sup>11</sup> at the Northeastern Ohio College of Medicine found that patients in an obstetrics and gynecology clinic overall felt that resident physicians dressed in surgical scrubs with a white coat made them feel more comfortable and confident than if dressed otherwise. On the question of a white coat specifically, the majority had no preference that their physician wear one.

So, it's very much unclear whether a white coat is a tension-causing, blood-pressure-elevating, infection risk or a competence-implying blood-pressure-lowering way to identify a physician. As a result, the jury is still out on whether physicians should wear white.

One thing I do know, however, is that patients shouldn't wear white. But they do. As an Otolaryngologist—Head and Neck Surgeon, my clinical practice is split between surgical procedures and office visits. Commonly, patients with sinus or nasal surgery will require some form of cotton gauze or foam material within the nose in order to tamponade bleeding. Similarly, patients presenting to the emergency department or urgent care center with epistaxis may have their noses "packed" and then be told to see an otolaryngologist (eg, me) in 3 or 4 days to have the packing removed. I also commonly remove facial skin lesions, biopsy tongue masses, reduce nasal fractures, and otherwise engage in activities with an above average propensity to result in a mess. More often than happenstance will allow, patients come to see me for such visits in their white Sunday best. I truly care for my patients. I respect them as individuals and desire to do no harm. This includes not staining their shirts, ties, or pants. However, there is no amount of blue towels or gauze pads than can keep a white shirt clean when you have that first sneeze after removal of your nasal packing.<sup>12</sup>

So what is it that makes so many patients come to the office in a white shirt? Perhaps patients subconsciously as-

sociate healthcare with the color white since their doctors wear white coats and the nurses wear starched white dresses with tight white folded caps on top of their head. I've never seen a nurse in a white dress and hat, but believe television programs have shown this in the past.

Maybe the answer lies in an adaptation of data from another Australian study. In a survey of 180 oncology patients about white coats on physicians, the most common argument against wearing the white coat was that it represented a barrier between the physician and the patient.<sup>13</sup> However, it is indeed the sane patient who desires to have a barrier between their physician and the removal of nasal packing, a skin lesion, or a tongue mass. Another possibility is that as fewer and fewer physicians wear white, patients are gravitating toward this color as a way of distinguishing themselves from the medical staff. Perhaps a person dressed in white is less likely to be grabbed in the hallway with a "Doctor come quick!" and more likely to be allowed to just sit peacefully in the waiting room with a 1997 issue of *Ladies Home Journal* or *Senior Fisherman* magazine.

Of course, perhaps patients believe the fashion experts who expound that white goes with everything. If so, they soon learn that white doesn't go so well with blotchy splattered red.

The truth is, I don't want my patients to wear white. Between making certain I project myself as approachable and easy to speak with, remembering to cover all the appropriate irrelevant parts of the history and physical to comply with billing requirements, entering data in our "easy-to-navigate" electronic medical record, and attempting to both diagnose the problem and discern an acceptable and effective treatment, the last thing I need is to worry about staining patient shirts! I believe that this phenomenon is widespread among medical practitioners and should be called "white-shirt-hypertension."

## Conclusion

After reviewing the available literature, I've determined that patients should not wear white. However, I'm still not certain how I should dress. For now, I'll stick with whatever is clean and professional and make sure my belt and shoes match. I may or may not wear a tie, since another study showed that 30% of patients believed their physician wore a tie even if they didn't.<sup>14</sup> Of course, I'll put on the white coat for the semiannual meeting with the chairman, or if I'm having something messy for lunch and wore a tie that day.

I'll also wear my name badge. It says I'm an attending physician and not a resident. It opens doors around the hospital. Literally. It's got a magnetic stripe.

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