

UC Davis

Dermatology Online Journal

Title

The effect of physician appearance on patient perceptions of treatment plans

Permalink

<https://escholarship.org/uc/item/3rr2v3pv>

Journal

Dermatology Online Journal, 27(5)

Authors

Bray, Jeremy K
Porter, Caroline L
Feldman, Steven R

Publication Date

2021

DOI

10.5070/D327553611

Copyright Information

Copyright 2021 by the author(s). This work is made available under the terms of a Creative Commons Attribution-NonCommercial-NoDerivatives License, available at <https://creativecommons.org/licenses/by-nc-nd/4.0/>

Peer reviewed

The effect of physician appearance on patient perceptions of treatment plans

Jeremy K Bray¹ BA, Caroline L Porter¹ MD, Steven R Feldman¹⁻³ MD PhD

Affiliations: ¹Center for Dermatology Research, Department of Dermatology, Wake Forest School of Medicine, Winston-Salem, North Carolina, USA, ²Department of Public Health Sciences, Wake Forest School of Medicine, Winston-Salem, North Carolina, USA ³Department of Pathology, Wake Forest School of Medicine, Winston-Salem, North Carolina, USA

Corresponding Author: Steven R Feldman, Department of Dermatology, Wake Forest School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27157-1071, Tel: 336-716-7740, Fax: 336-716-7732, Email: sfeldman@wakehealth.edu

Abstract

The presentation of a physician's clothing and themselves is an important part of the physician-patient interaction. Physician attire can impact patient satisfaction and trust in their physician. We sought to discover the influence physician attire may have on patients' comfort level with proposed treatment plans, which could influence treatment adherence. We surveyed 495 subjects to better understand the relationship between physician attire and patients' perceptions of treatment plans. We found subjects' comfort level in proposed treatment plans was not significantly affected by physician attire. This finding suggests physician attire may not be as important when considering the potential effect on treatment adherence.

Keywords: adherence, appearance, attire, medication, physician, satisfaction, treatment

Introduction

Although physician attire can influence patient satisfaction, trust, and confidence in their physician [1-3], its effect on patient perceptions of proposed treatment plans is not well characterized. By investigating the impact of physician attire on patient perceptions of treatment plans, physicians can better understand how their attire may influence treatment initiation and adherence.

Discussion

Following IRB approval, 495 subjects >18 years were recruited through Amazon Mechanical Turk (MTurk), [4]. Subjects were randomized into four groups, each of which were presented with photographs of a physician wearing one of the following: 1) business casual and stethoscope, 2) business casual, 3) dress shirt, tie, and stethoscope, or 4) dress shirt and tie (**Figure 1**). Demographic information of age, gender, and race/ethnicity were also collected. Treatment plan perception was assessed on a 10-point scale and compared using single-factor ANOVA and t-tests. For N=495, we had 95% power to detect a mean difference of 0.3 between any two groups. P values <0.05 were considered statistically significant.

A total of 495 subjects completed the survey. There were no significant differences between the groups' baseline characteristics (**Table 1**). Participants were mean age of 36 years (SD 11.6) and were 52% male and 47% female (1% declined to disclose their sex); the majority (53%) were Caucasian, followed by 30% Asian or Pacific Islander, and 8% African-American; most had a bachelor's degree or higher (66%); most reported having health insurance (80%).

Despite a fairly large sample size, no significant differences in perceived comfort levels were detected between any of the groups (P=0.51, **Figure 2**). On a scale of 1 (not comfortable at all) to 10 (completely comfortable), subjects presented with a physician in business casual and stethoscope reported an average comfort rating of mean (M)=7.1,



Figure 1. The presentation of the different physician attire options. Participants were presented with one of the four photos below and asked the following: Your physician (pictured above) suggests a new treatment plan for you. On a scale of one (not comfortable at all) to 10 (completely comfortable), how comfortable would you be with this physician's new treatment plan?

standard deviation (SD)=2.0, whereas subjects presented with a physician in business casual and no stethoscope reported a rating of M=6.8, SD=1.9.

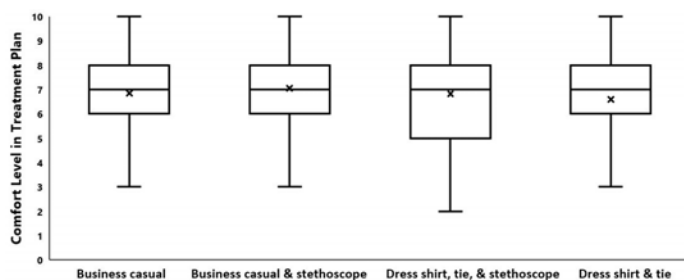


Figure 2. Comparison of mean comfort scores for each group. Boxes depict 25th and 75th quartiles. Error bars indicate maximum and minimum scores. Median scores are depicted as the horizontal line in each box, whereas mean scores are indicated by the "X" in each box.

Subjects presented with a physician in a dress shirt, tie, and stethoscope reported an average comfort rating of M=6.8, SD=1.9, whereas subjects presented with a physician in a dress shirt, tie, and no stethoscope reported M=6.5, SD=2.0. Patient demographics were not associated with reported comfort with the treatment plan (P>0.1).

The way a physician dresses can have an impact on patient perceptions of trust, satisfaction, and confidence in their physicians [5]. However, in our investigation physician the exhibited changes in attire did not appear to have a significant effect on patients' comfort level with proposed treatment plans.

This study has limitations. Subject-reported perceptions may not correlate with actual medication-taking behavior. Participants were not required to have a particular condition to participate and their treatment history was not recorded.

The implementation of a physician dress code in certain regions and contexts may improve patient satisfaction with their physicians [1], but our results suggest patients' acceptance of treatment plans are not as impacted by physician attire. Regardless of business-casual versus business-professional, or stethoscope versus no-stethoscope, each group reported very similar average comfort levels with the presented treatment plans.

Conclusion

The current pandemic has led to many clinics across the country moving away from previously established dress codes and guidelines (e.g. white coats, ties, personal stethoscopes) to create a more sanitary environment and prevent the spread of COVID-19. Our results may alleviate some concerns that certain forms of attire do not appear professional enough over the internet (e.g. business casual, scrubs). Subjects' comfort level in proposed treatment plans was not significantly affected by physician attire, which suggests certain dress codes may not be as important when considering the potential effect on treatment adherence.

Potential conflicts of interest

S.R.F. has received research, speaking and/or consulting support from a variety of companies including Galderma, GSK/Stiefel, Almirall, Leo Pharma, Baxter, Boeringer Ingelheim, Mylan, Celgene, Pfizer, Valeant, Taro, Abbvie, Cosmederm, Anacor, Astellas, Janssen, Lilly, Merck, Merz, Novartis, Regeneron, Sanofi, Novan, Parion, Qurient, National

Biological Corporation, Caremark, Advance Medical, Sun Pharma, Suncare Research, Informa, UpToDate and National Psoriasis Foundation. He is founder and majority owner of www.DrScore.com and founder and part owner of Causa Research, a company dedicated to enhancing patients' adherence to treatment. J.K.B. and C.L.P. have no conflicts to disclose.

References

1. Petrilli CM, Saint S, Jennings JJ, et al. Understanding patient preference for physician attire: a cross-sectional observational study of 10 academic medical centres in the USA. *BMJ Open*. 2018;8:e021239. [PMID: 29844101].
2. Zollinger M, Houchens N, Chopra V, et al. Understanding patient preference for physician attire in ambulatory clinics: a cross-sectional observational study. *BMJ Open*. 2019;9:e026009. [PMID: 31072853].
3. Jennings JD, Pinninti A, Kakalecik J, et al. Orthopaedic Physician Attire Influences Patient Perceptions in an Urban Inpatient Setting. *Clin Orthop Relat Res*. 2019;477:2048-2058. [PMID: 31294719].
4. Buhrmester M, Kwang T, Gosling SD. Amazon's Mechanical Turk: A New Source of Inexpensive, Yet High-Quality, Data? *Perspect Psychol Sci*. 2011;6:3-5. [PMID: 26162106].
5. Petrilli CM, Mack M, Petrilli JJ, et al. Understanding the role of physician attire on patient perceptions: a systematic review of the literature--targeting attire to improve likelihood of rapport (TAILOR) investigators. *BMJ Open*. 2015;5:e006578. [PMID: 25600254].