

# Rural Patient Preference for Physician Attire

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### Abstract

**Introduction:** Physicians need to foster healthy relationships with patients to optimize care, with time constraints and workloads being barriers. Studies have shown the importance of first impressions, which are influenced by attire. Studies of physician attire have previously been conducted in metropolitan populations. This study's goal was to investigate patient preferences for physician attire among rural populations.

**Methods:** A cross-sectional study of patients was conducted in waiting rooms of five ambulatory clinics dispersed throughout rural northern Michigan. Anonymous surveys contained a series of photos of a male and a female physician, with photos within the series differing only by apparel. Participants indicated which male and female physician they would prefer in various scenarios. Participants provided demographic information and indicated their own physician's usual attire. Responses were analyzed using comparative statistics and logistic regression.

**Results:** Survey response rate was 78% (92/118). Similar to metropolitan studies, patients preferred professional attire including white coat in almost all scenarios. For most scenarios, participants preferred professional attire for both male and female physicians, however respondents were more tolerant of casual attire for female physicians. Older participants and those whose physician dressed casually tended to be more tolerant of casual attire. Patients preferred surgical attire only in emergency situations.

**Conclusions:** This study of a rural population showed a clear preference for professional physician attire. In general, rural physicians should consider wearing professional attire with white coat in order to best meet patient expectations. Further investigations are needed to enhance the generalizability of study findings.

### Introduction

Physicians need to establish rapport, gain trust, and provide quality care, all within a busy environment. In busy settings it is often imperative for physicians to make a good impression quickly. Appearance plays a role in the formation of an observer's initial opinion,<sup>1</sup> especially in professional settings.<sup>2</sup> Previous studies have shown that physician attire is an important factor for patient trust, confidence, and satisfaction.<sup>3-6</sup> Importantly, patients are more likely to disclose personal information and incorporate physician recommendations when they view physicians as competent, supportive, and respectful.<sup>7</sup>

Previous research has shown that patients generally prefer traditional attire for physicians, specifically a white coat.<sup>8-17</sup> These studies were conducted in metropolitan populations however. Values and perceptions of rural patients may differ from their urban counterparts. As 20% of the nation's population is rural, understanding rural preferences may help interested physicians better meet patients' expectations.

The goal of this study is to determine whether views of rural patients toward physician attire differ from those of urban populations. To do this, rural patients in northern Michigan were surveyed regarding preferences and attitudes toward physician attire.

## Methods

Researchers conducted a cross sectional study utilizing a previously validated and published survey on physician attire.<sup>6</sup> The surveys contained a series of pictures depicting both a female and male doctor. The only difference between each series of photos was the attire the two physicians wore; facial expressions, hairstyle, stance, and jewelry were identical. The pictures contained four different categories of attire for each gender: business, professional, surgical, and casual. Table 1 describes each category.

The surveys contained 14 questions for both the female and the male set of photos. Examples of survey questions included "Which would you prefer to be your family doctor? Which of these doctors would you trust the most? Which of these doctors would you expect to be more responsible?". For all questions, patients were instructed to mark the box under the picture that corresponded to their preference. Participants also completed demographic information and indicated which type of attire their personal physician typically wore.

Surveys were distributed during a three-month period in 2014 to outpatient clinics in rural northern Michigan, including two family medicine clinics, an internal medicine clinic, a general surgery clinic, and an OBGYN clinic. Employees were instructed to distribute surveys to adult clients in the waiting room randomly throughout the workday. Completed surveys were collected anonymously, and response rate was calculated based on the number of surveys distributed and those returned. All surveys clearly marked by patients were used in the analysis.

Results were analyzed using chi-square or Fisher's exact test as appropriate. The responses for female physician and male physician attire for each scenario were compared using the McNemar-Bowker test. Binary logistic regression was used to compare the contribution of significant variables. Data was compared using SPSS Statistical Software Version 23, with significance for all analyses set at p<0.05. The study was approved by Munson Medical Center's IRB.

## Results

A total of 118 surveys were distributed, with 92 surveys returned (response rate 78%). Respondents were 76% female. The majority of participants were Caucasian (92.4%), which is reflective of the region's population. Of study participants, 49% had a degree higher than a high school diploma. Table 2 describes participant demographics.

Rural patient preferences for physician attire for male and female physicians are presented in Table 3. For nearly all scenarios, participants preferred professional attire for both male and female physicians, but where differences existed, respondents tended to be more tolerant of casual attire for female physicians. A notable exception to this preference for professional attire was surgical attire in emergency situations for both male and female physicians. As professional attire was preferred in nearly all situations, professional attire was compared to a grouping of all other attire categories for the remainder of the analysis.

Preference of attire for family physicians was used to comparatively analyze results based on survey participant demographics. Results of preferred attire for male and female family physicians were compared by participants' gender, age (18-49 vs. 50+), educational level (college graduates vs. all other), and own physician attire (professional vs. all others). Results are shown in Table 4. There was a trend toward preferring professional attire for male family physicians among most groups, with older male participants and those whose physicians dressed more casually showing some tolerance of casual attire. Interestingly, most groups showed a slight preference for casual attire for female family physicians, with the exception of patients whose physicians dressed professionally. Logistic regression was performed to assess the impact of participant demographic factors on preference for male family physician attire. The model included three independent variables (age of participant, gender of participant, and attire of participant's physician). The full model, including all variables, was statistically significant (X<sup>2</sup>(3, N=72)=22.83, *P*<0.01). Age and the attire worn by the participant's physician made unique statistically significant contributions to the model, with the strongest predictor of preferring professional attire for male family physicians being if the participant's physician dressed professionally (odds ratio of 11.8), followed by age less than 50 years (odds ratio of 4.0).

## Conclusion

In this study focused on rural populations, respondents overall preferred professional attire with white coats for physicians. The results of this study are similar to previously conducted studies in metropolitan areas, most of which showed a similar predilection for physicians to dress professionally with white coats.

Although rural patients preferred professional physician attire, there was a higher tolerance for casual attire compared to previous metropolitan-based studies.<sup>6</sup> This trend was strongest among patients who indicated their own physicians dressed casually. It may be that patients become accustomed to the appearance of physicians in their community, affecting expectations. In addition, rural populations may have a more relaxed view of society and may place less emphasis on attire, resulting in more tolerance for casual apparel. Physicians are often well known in small communities, and familiarity may break down traditional hierarchal separations that may exist in larger communities. Regardless, despite this trend toward some tolerance for casual apparel, in most situations rural patients expressed a preference for physicians to dress professionally.

The study is limited in generalizability in that all respondents were surveyed in rural northern Michigan. Future studies could focus on diverse geographical locations and include more ethnic diversity. Study was also limited by the use of self-reported data rather than observing actual behavior. The research methods used in this study relied on a two dimensional view that did not delve into other important attitudinal or experiential factors that contribute to a person's perception, which could have impacted results. It is also unclear whether a physician's attire remains important once a relationship is established. A final important limitation of the study is that the female series of photos depicted a female physician in surgical attire, a skirt, or a dress. This was true even with casual attire, which was a casual appearing denim dress. These photographs were used to allow comparison to the previously published metropolitan-based study, but may be why participants were more tolerant of casual attire specifically for the female physician when compared to the male. Due to this limitation, logistic regression comparing participant demographics and attire preference was performed using only the male physician model.

In conclusion, this study of a rural population demonstrated a preference for professional physician attire. In general, rural physicians should consider wearing professional attire with white coat in order to best meet patient expectations, especially when relying on a first impression. Further studies to increase generalizability of findings are needed.

## **Tables and Figures**

Table 1

	Business	Professional	Surgical	Casual	
Male	Suit with white shirt and tie	Dress shirt, tie, white coat	Surgical scrubs	Dark T-shirt and jeans	
Female		White coat covering skirt and professional blouse	Surgical ecruhe	Casual denim above-knee dress with short sleeves	

### Table 2: Respondent Demographics

Gender	Female	70 (76%)		
Gender	Male	22 (24%)		
A.a.a.	Mean (SD)	52.5 years (17.7 years)		
Age	Range	22-87 years		
	African-American	1 (1.1%)		
	Native American/Alaskan Native	3 (3.3%)		
Race	Caucasian	85 (92.4%)		
	Male   22 (24     Mean (SD)   52.5 years (1     Range   22-87 y     African-American   1 (1.1     Native American/Alaskan Native   3 (3.3     Caucasian   85 (92.     Other   1 (1.1     Did not answer   2 (2.2     Some High School   2 (2.2     High School Graduate   17 (18.     Some College   28 (30.)     Trade School Degree   4 (4.3.     College Graduate   31 (33.)     Postgraduate Degree   10 (10.)     Family Medicine   42 (45.)     Internal Medicine   12 (13.)     OB/Gyn   11 (12.)     Surgery   27 (29.)     Business   13 (14.)     Casual   31 (33.)     Professional   37 (40.)     Surgical   3 (33.3)	1 (1.1%)		
	Did not answer	2 (2.2%)		
	Some High School	2 (2.2%)		
	High School Graduate	17 (18.5%)		
Education	Some College	28 (30.4%)		
Education	Trade School Degree	4 (4.3%)		
	Male   Male   Mean (SD) 52.5   Range   African-American   Native American/Alaskan Native   Caucasian   Other   Did not answer   Some High School   High School Graduate   Some College   Trade School Degree   College Graduate   Postgraduate Degree   Family Medicine   Internal Medicine   OB/Gyn   Surgery   Business   Casual   rrel	31 (33.7%)		
	Postgraduate Degree	10 (10.9%)		
	Family Medicine	42 (45.7%)		
Office Type	Internal Medicine	12 (13%)		
Onice Type	OB/Gyn	11 (12%)		
	Surgery	27 (29.3%)		
	Business	13 (14.1%)		
	Casual	31 (33.7%)		
Own Doctor's Apparel	Professional	37 (40.2%)		
	Surgical	3 (3.3%)		
	Did not answer	8 (8.7%)		

### Table 3: Aggregate data for preferred physician attire.

	Mala abusidas				Ferrels studieles					
	Male physician			Female physician						
	Business	Casual	Professional	Surgical	NA^	Business	Casual	Professional	Surgical	NA^
Which would you prefer:										
For a routine physical exam?	4 (4.8%)	17 (20.7%)	59 (71.9%)	2 (2.4%)	10	3 (3.6%)	35 (41.7%)	44 (52.4%)	2 (2.4%)	8
To be your family doctor?	5 (6.3%)	23 (29.1%)	51 (64.5%)	0	13	5 (6.0%)	40 (47.6%)	39 (46.4%)	0	8
For an emergency?	2 (2.7%)	5 (6.7%)	29 (38.7%)	39 (52.0%)	17	1 (1.2%)	7 (8.3%)	26 (31.0%)	50 (59.5%)	8
To discuss intimate or sexual issues?	5 (6.5%)	18 (23.4%)	54 (70.1%)	0	15	8 (9.6%)	29 (34.9%)	45 (54.2%)	0	10
To discuss psychological problems?	14 (17.7%)	18 (22.8%)	47 (59.5%)	0	13	15 (17.9%)	29 (34.5%)	39 (46.4%)	0	9
For a minor medical problem?	7 (9.0%)	24 (31.2%)	42 (54.5%)	4 (5.2%)	15	4 (4.6%)	42 (48.8%)	37 (43.0%)	3 (3.5%)	6
Which of these doctors would	d you:									
Trust the most?	6 (8.0%)	12 (16%)	50 (66.7%)	7 (9.3%)	17	3 (3.9%)	21 (27.6%)	44 (57.9%)	8 (10.5%)	16
Be more likely to follow their advice?	5 (6.8%)	12 (16.4%)	51 (69.9%)	5 (6.8%)	19	4 (5.3%)	18 (23.7%)	46 (60.5%)	8 (10.5%)	16
Have the most confidence in their diagnosis and treatment?	3 (4.2%)	8 (11.3%)	55 (77.5%)	5 (7.0%)	21	3 (3.9%)	15 (19.7%)	51 (67.1%)	7 (9.2%)	16
Be more likely to return for follow-up care?	6 (8.5%)	15 (21.1%)	48 (67.6%)	2 (2.8%)	21	3 (4.1%)	24 (32.9%)	43 (58.9%)	3 (4.1%)	19
Which of these doctors would	d you expect to	o be more:								
Knowledgeable and competent?	8 (11.0%)	8 (11.0%)	552 52 (71.2%)	5 (6.8%)	19	5 (6.8%)	14 (18.9%)	46 (62.2%)	9 (12.2%)	18
Caring and compassionate?	8 (10.5%)	18 (23.7%)	44 (57.9%)	6 (7.9%)	16	8 (10.5%)	28 (36.8%)	35 (46.1%)	5 (6.6%)	16
Responsible?	10 (13.9%)	7 (9.7%)	49 (68.1%)	6 (8.3%)	20	11 (14.7%)	14 (18.7%)	41 (54.7%)	9 (12.0%)	17
Authoritative and in control?	13 (17.8%)	6 (8.2%)	48 (65.8%)	6 (8.2%)	19	18 (23.4%)	10 (13.0%)	36 (46.8%)	13 (16.9%)	15

\*P-value statistically significant at P<0.05. Significant P-values represent significant difference in distribution of attire preferences for male and female physicians. NA=Did not answer question.

Shaded areas represent patient preference for each category.

		Male Family Physicians			Female Family Physicians			
		Professional	All other	X <sup>2</sup> /df P-value	Professional	All other	X²/df P-value	
Participant	Male	8 (40%)	12 (60%)	7.058/1	8 (36%)	14 (64%)	1.214/1	
Gender	Female	43 (73%)	16 (27%)	0.01*	31 (50%)	31 (50%)	0.27	
Participant Age	18-49	29 (78%)	8 (22%)	5.251/1	17 (47%)	19 (53%)	0.02/1	
	50+	22 (54%)	19 (46%)	0.02*	21 (46%)	25 (54%)	0.89	
Education level	College grads	25 (69%)	11 (31%)	.690/1	18 (49%)	19 (51%)	.131/1	
	All other	26 (60%)	17 (40%)	0.41	21 (45%)	26 (55%)	0.72	
Own Physician	Professional	29 (88%)	4 (12%)	13.092/1	30 (83%)	6 (17%)	32.887/1	
Attire	All other	19 (47%)	21 (53%)	<0.01*	8 (19%)	35 (81%)	<0.01*	

Table 4: Rural participant characteristics and preference for attire preference specifically for male and female family physicians

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