

Perceptions of Outpatients Regarding the Attire of Physiotherapists

Erin Mercer, Marilyn MacKay-Lyons, Nicki Conway, Jennifer Flynn, Chris Mercer

ABSTRACT

Purpose: This study investigated perceptions of patients regarding physiotherapists' attire.

Methods: Three hundred patients in three publicly funded outpatient physiotherapy clinics were asked to complete a questionnaire, ranking four photographed modes of attire (lab coat, tailored dress, "scrubs," and jeans) in terms of professionalism, preference, and appropriateness and rating their level of agreement with four statements about physiotherapists' attire.

Results: Response rate was 63.7%. The lab coat was ranked most professional, tailored dress most preferred, and jeans least professional and least preferred. Although jeans were deemed inappropriate ($p < 0.001$), strong support was shown for wearing jeans on "casual day" ($p = 0.001$). Age of respondents influenced the perception of the appropriateness of wearing jeans ($p = 0.007$ for male therapist; $p = 0.017$ for female therapist); only the cohort < 36 years considered jeans appropriate apparel. Overall exposure to physiotherapists (number of lifetime visits) affected patients' perceptions of the importance of attire ($p = 0.039$) and the appropriateness of wearing jeans ($p = 0.018$): as number of visits increased, perceived importance decreased and perceived propriety of jeans increased.

Conclusion: The findings of this study, the first to examine patients' opinions of physiotherapists' attire, suggest that outpatients made clear distinctions between what they perceived as professional and what they preferred, as well as between the appropriateness of physiotherapists' wearing jeans in general and the appropriateness of their doing so on "casual day." Age and exposure to physiotherapists influenced patients' perceptions of attire.

Key Words: attire, patient satisfaction, physical therapist, professionalism, questionnaire

Mercer E, MacKay-Lyons M, Conway N, Flynn J, Mercer C. Perceptions of outpatients regarding the attire of physiotherapists. Physiother Can. 2008;60:349-357.

RÉSUMÉ

Objet: Cette étude a investigué la perception qu'ont les patients de la tenue des physiothérapeutes.

Méthodologie: On a demandé à 300 patients de trois cliniques de physiothérapie externes publiques de remplir un questionnaire, classant la photographie de quatre tenues (blouse de laboratoire, tenue habillée, uniforme [«scrubs»] et jeans) en termes de professionnalisme, de préférence et de convenance et d'évaluer le niveau d'acquiescement avec les quatre énoncés à propos de la tenue des physiothérapeutes.

Résultats: Le taux de réponse a été de 63,7%. La blouse de laboratoire a connu la cote la plus élevée de l'aspect professionnel, la tenue habillée était la plus préférée et le jeans le moins professionnel et le moins aimé. Bien que le jeans ait été considéré comme peu convenable ($p < 0,001$), le port du jeans pour «la journée du décontracté» a suscité un soutien solide ($p = 0,001$). L'âge des répondants a joué sur la perception de la convenance du port du jeans ($p = 0,007$ pour l'homme physiothérapeute; $p = 0,017$ pour la femme physiothérapeute); seule la cohorte des < 36 ans considérait le jeans comme une tenue convenable. La visibilité totale des physiothérapeutes (nombre de visites à vie) a joué sur la perception qu'ont les patients de l'importance de la tenue ($p = 0,039$) et de la convenance du port du jeans ($p = 0,018$), de sorte qu'avec le nombre de visites, l'importance a diminué et la convenance du jeans a augmenté.

Conclusion: Les résultats de cette étude, la première à sonder l'opinion qu'ont les patients de la tenue des physiothérapeutes, suggèrent que les patients externes ont établi des distinctions manifestes entre ce qu'ils percevaient comme tenue professionnelle par rapport à leur préférence, ainsi que la convenance des physiothérapeutes qui portent le jeans en général par rapport à «la journée du décontracté». L'âge des patients et le nombre de visites aux physiothérapeutes ont joué sur la perception des patients concernant la tenue.

Mots clés: physiothérapeute, professionnalisme, questionnaire, satisfaction des patients, tenue

Erin Mercer, BScPT, received her physiotherapy degree from Dalhousie University, Halifax, Nova Scotia. This study was completed as part of the requirements for the Bachelor of Science programme.

Marilyn MacKay-Lyons, PhD, MScPT, BScPT: Associate Professor, School of Physiotherapy, Dalhousie University, Halifax, Nova Scotia.

Nicki Conway, BScPT, received her degree from Dalhousie University. This study was completed as part of the requirements for the Bachelor of Science Programme.

Jennifer Flynn, BScPT, received her degree from Dalhousie University, Halifax, Nova Scotia. This study was completed as part of the requirements for the Bachelor of Science programme.

Chris Mercer, BScPT, received his degree from Dalhousie University, Halifax, Nova Scotia. This study was completed as part of the requirements for the Bachelor of Science programme.

Address for correspondence: Marilyn MacKay-Lyons, School of Physiotherapy, Dalhousie University, 5869 University Avenue, Halifax, NS B3H 3J5; E-mail: m.mackay-lyons@dal.ca.

DOI:10.3138/physio.60.4.349

BACKGROUND

Proper appearance has been identified as one of the three components of professionalism essential in establishing successful patient–health care professional relationships, together with behaviour and verbal communication.¹ Attire, as one of the major determinants of appearance and a key element of nonverbal communication, plays a critical role in the establishment and sustainability of these relationships.² However, with the ongoing trend in Western society toward more casual attire, as well as the popularity of “casual Fridays” (when employees may elect to wear casual clothing, such as jeans), standards for professional dress appear to have been lowered. These observations raise questions about the impact of relaxed standards on the patient–health care professional relationship.

During a period when dress codes are being challenged, patients’ perceptions of the attire of health care professionals, particularly nurses, dentists, and physicians, have become an area of interest to researchers and clinicians. The majority of studies of nursing attire have shown an overwhelming patient preference for the white uniform, primarily because it aids in recognition within the hospital setting.^{3–5} In contrast, another study reported that, despite the concern for easy recognition, patients preferred nursing staff to wear casual attire as a mechanism for reducing barriers to relationship formation, reducing stress, developing understanding, facilitating self-advocacy, and enhancing feelings of equity.⁶

Preference for more formal attire has been reported for dentistry faculty and students; patients associate such attire with improved comfort and decreased anxiety levels.⁷ A common finding in the medical literature is that patients prefer physicians to wear a white lab coat and a name tag.^{8–10} In a review of studies on professional dress, Brandt concluded that physicians’ attire does not appear to affect overall patient satisfaction with care, across all lines of population and geography.¹¹ However, he also noted an interesting pattern in the findings—while a neat, clean appearance and appropriate demeanour are of greater concern than physician dress, the majority of patients, especially seniors, tended to favour more formal physician attire.¹¹ In support of this view, Pronchik and colleagues found that although wearing a necktie (the traditional symbol of male medical authority¹²) did not affect patients’ impressions of their physician or of the quality of care, patients preferred the appearance of physicians who wore neckties.¹³ Nevertheless, the Department of Health in England recommends against wearing neckties during activities that involve patient contact, reasoning that ties perform no beneficial function in patient care and have been shown to be colonized by pathogens.¹⁴

Within the medical profession, variability exists with respect to the attire patients prefer, depending

on specialty. Patients tend to expect surgeons to dress formally but are more accepting of paediatricians, psychiatrists,¹⁵ and emergency physicians¹⁶ wearing less formal attire. Rajagopalan and colleagues found some support for this claim in their observation that while most patients with mental health concerns did not feel that the dress of psychiatrists and case workers was an important issue, those who did preferred less formal attire.¹⁷ Similarly, a recent study reported no differences in overall patient satisfaction among obstetricians randomly assigned to dress in business attire, casual clothing, or scrubs.¹⁸ Disparity among physician groups may be due to specialty-specific differences in the demographics of the patient populations and in patient–physician relationships.

Although Canadian physiotherapists have witnessed dramatic transformations in the approach to attire over the history of the profession, there has been little documentation on the issue. From its inception at the time of World War I and up until the mid-1970s, the profession used uniforms to help define its place within the health care team.¹⁹ Gradually, however, as autonomy of practice evolved and physiotherapists began to move from the public into the private sector, their use of uniforms began to diminish. Today, the attire of Canadian physiotherapists seems to follow loose guidelines that appear to vary across practice settings. Questions remain about how this shift in the presentation of the physiotherapist might affect patients’ impressions. The purpose of this study was to investigate perceptions of outpatients in publicly funded adult facilities regarding the attire of physiotherapists.

METHOD

Questionnaire Development

A series of guiding questions related to the study’s purpose was formulated to assist in item generation and organization, and an outline of the information needed to answer these questions was developed. Previous literature and published questionnaires were reviewed, and items relevant to the guiding questions were incorporated in the preliminary draft of the questionnaire.^{6,7,20} Principles used to guide item generation included the following: (1) each item must make a direct and meaningful contribution to the purpose of the study; (2) items must be comprehensible at a Grade 8 reading level; (3) time to complete the survey must be approximately 10 minutes; (4) all items must be closed-ended, in response to a request from the clinics’ managers to avoid undue imposition on the part of the patients completing the questionnaire.

The questionnaire was divided in three sections. Section 1 probed patients’ perceptions of four modes of attire worn by physiotherapists practising in the location

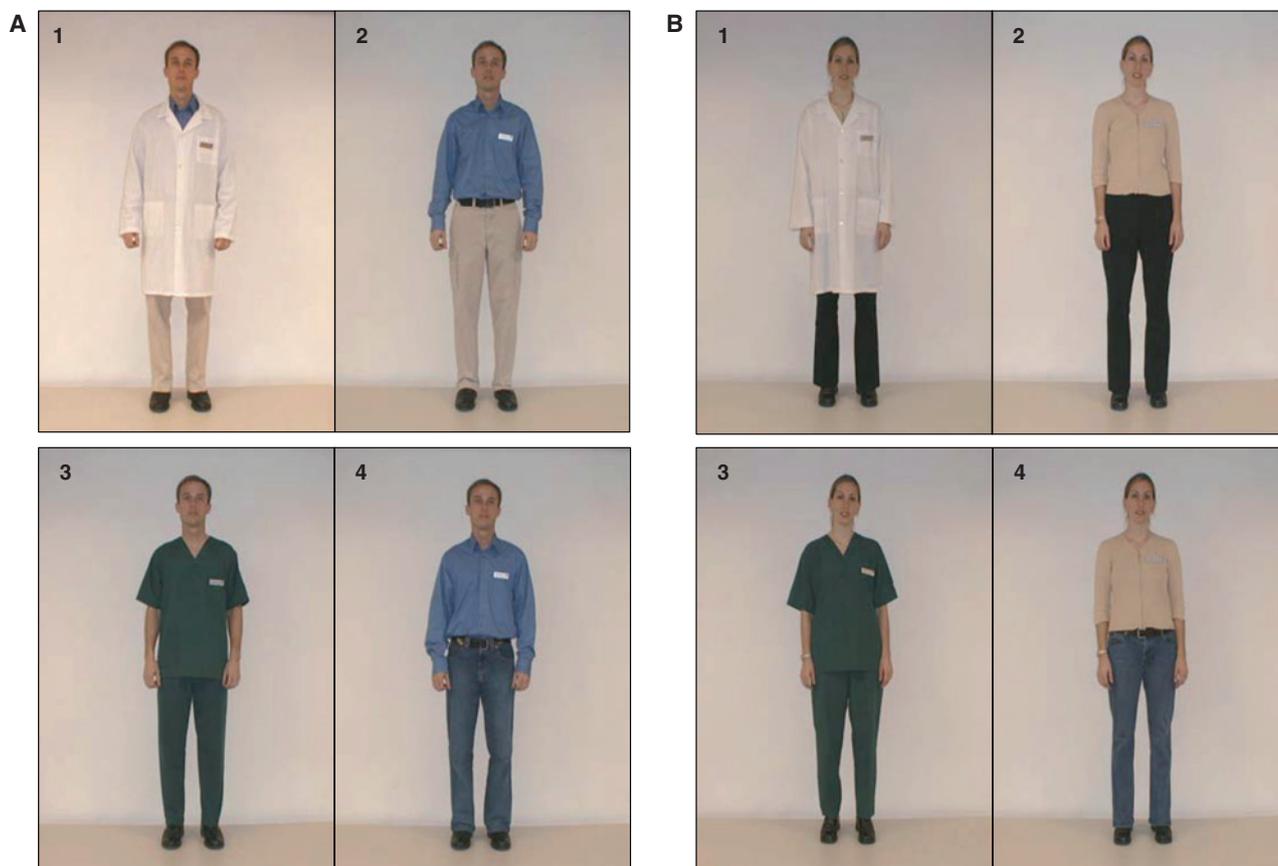


Figure 1 Photographs of a male physiotherapist (A) and a female physiotherapist (B) modelling the four modes of attire: (1) lab coat, (2) tailored dress, (3) surgical “scrubs,” and (4) jeans. The photographs in the actual questionnaires were larger (3 × 4”) and were presented in random order

of the study: lab coat, tailored dress, surgical shirt and pants (hereafter referred to as “scrubs”), and jeans. Respondents rated four 8 × 10 cm colour photographs of a male model and a female model (Figure 1) on a four-point or two-point scale in terms of professionalism (1 = appears most professional, 4 = appears least professional), preference (1 = clothing I would most like my physiotherapist to wear, 4 = clothing I would least like my physiotherapist to wear), and appropriateness (appropriate = clothing is appropriate for a physiotherapist to wear while treating you; inappropriate = clothing is inappropriate for a physiotherapist to wear while treating you). The order of the photographs was randomized in the questionnaires to counter a potential order effect. Section 2 addressed current issues regarding attire and professionalism. A five-point Likert scale (1 = strongly agree, 3 = neutral, 5 = strongly disagree) was used to elicit responses to four statements addressing the importance of attire, trust in the physiotherapist, propriety of wearing jeans while treating patients, and appropriateness of wearing jeans on “casual day.” Section 3 included demographic information (i.e., age, sex, level of education, physiotherapy site, number of physiotherapy visits over the patient’s lifetime). A brief cover letter included

statements regarding the purpose of the questionnaire, intended use of the collected data, anonymity of respondents, and approximate time to complete the questionnaire, as well as an expression of appreciation from the investigators. In addition, the letter indicated that “by completing and returning this questionnaire, you are giving your consent to participate in this study.”

Face and content validity of the preliminary questionnaire were assessed by a panel of 25 experts, including 10 university professors involved in educating physiotherapy students and 15 physiotherapists (5 from each of the 3 study sites) with 5 or more years’ clinical experience. Written feedback on item selection, wording, organization, and presentation was received from 21 panellists (response rate of 84%), and revisions to the questionnaire were made accordingly. The revised questionnaire was then pilot-tested on a representative sample from the general public. Feedback on readability and time to complete the questionnaire was solicited from 25 individuals from the general population (10 men and 15 women, ranging from 19 to 89 years of age and with educational backgrounds ranging from Grade 6 through doctorate level). Minor revisions were made in response to the resulting feedback. The final version of

the questionnaire took approximately 9 minutes to complete and was written at a grade level of 8.6 according to the Flesch-Kincaid Readability Test.²¹

Questionnaire Distribution

Once Institutional Review Board approval was received from the Capital District Health Authority, 300 questionnaires were distributed—100 to each of three publicly funded physiotherapy clinics in a health care complex located in an urban setting near several universities and colleges. These sites were purposively selected because they constituted the city's main public facilities offering adult outpatient physiotherapy services. Site 1 served patients with acute musculoskeletal conditions; Site 2 served patients with more chronic musculoskeletal conditions; Site 3, situated in a rehabilitation centre, served a diversity of patients with subacute and chronic conditions. Sample-size estimation was based on the number of completed questionnaires needed to achieve 80% power at a significance level of $p=0.05$ and a chi-square (χ^2) effect size index of $\omega=0.30$ with 3 degrees of freedom.²² Using these parameters, a minimum sample of 121 completed questionnaires was deemed necessary. Anticipating a response rate of about 50%, we chose to distribute 300 questionnaires.

The receptionists at each site handed out the questionnaires to consecutive outpatients when they registered for their physiotherapy appointments. (Patients are required to register prior to each appointment.) The majority of patients completed the questionnaire while waiting for their physiotherapy appointment and placed the completed questionnaires in a marked box located at the reception desk. Patients who preferred to complete the questionnaire outside of the clinic were provided with a stamped return envelope. Identity of the respondents was not revealed in the questionnaire. Competence was assumed by the ability of respondents to complete the questionnaire.

Data Analysis

Data on background characteristics of the respondents were summarized using descriptive statistics. Section 1 data from the ranking of the photographs were analyzed using the Friedman test, the non-parametric equivalent of a one-sample, repeated-measures design or a two-way analysis of variance.²² The Friedman χ^2 test statistic was based on the respondents' ranking (1–4) of the four modes of attire worn by the male and female models in terms of professional appearance and respondents' preferences. Data on appropriateness of the attire modelled in the photographs were analyzed using the Pearson χ^2 test to determine whether the observed frequencies of responses differed from their expected values. Post-hoc analysis of significant results involved calculating the standardized residuals to

determine the relative contribution of each response category to the overall value of the χ^2 . Residuals greater than 2.0 are generally interpreted as being important.²²

Section 2 data on the respondents' agreement with the four statements were recoded: "slightly agree" and "strongly agree" responses were combined to form an "agree" category, and "slightly disagree" and "strongly disagree" responses were collapsed to form a "disagree" category. Again, the Pearson χ^2 test was used to identify differences between observed and expected frequencies of responses to each statement, and standardized residuals were calculated to ascertain the contribution of each response category (agree, neutral, and disagree) to the overall χ^2 statistic. Cross-tabulations were used to explore the influence of respondents' background information (i.e., site, sex, age, educational level, and number of visits to physiotherapy) on responses regarding the appropriateness of the photographs (Section 1) and the four statements (Section 2). To assess the strength of significant influences, Cramer's V coefficient was calculated, the upper limit of which is ± 1.00 .²² For all analyses, an alpha level of $p < 0.05$ was considered significant. Data were analyzed using SPSS 11.0.4 for Mac OS X (SPSS Inc., Chicago, IL).

RESULTS

Of the 300 questionnaires, 244 were returned; 53 of these were discarded due to missing data, giving a response rate of 63.7%. Background characteristics of the respondents are summarized in Table 1. The majority of respondents were female, between 36–55 years of age, and university or college educated. Representation of

Table 1 Background Characteristics of Respondents

Characteristic	n	%
Sex		
Female	128	67.0
Male	63	33.0
Age group (years)		
18–35	29	15.2
36–55	102	53.4
56–75	53	27.7
> 75	7	3.7
Educational level		
Grade 8 or less	7	3.7
Completed high school	57	29.8
College/university	127	66.5
Site of physiotherapy department		
Site 1	54	28.3
Site 2	61	31.9
Site 3	76	39.8
Lifetime visits to physiotherapy (n)		
< 11	43	22.5
11–25	44	23.0
26–50	47	24.6
51–100	25	13.1
> 100	32	16.2

Table 2 Ranking of Photographs in Terms of Professionalism and Preference of Attire

		Mean Rank	Male Model			Mean Rank	Female Model		
			χ^2	df	p		χ^2	df	p
Professionalism	Lab coat	1.85	177.39	3	<0.001	1.95	171.00	3	<0.001
	Tailored dress	2.10				2.14			
	Scrubs	2.45				2.32			
	Jeans	3.60				3.60			
Preference of attire	Lab coat	2.71	122.43	3	<0.001	2.69	122.13	3	<0.001
	Tailored dress	1.67				1.70			
	Scrubs	2.42				2.39			
	Jeans	3.20				3.23			

Table 3 Rating of Photographs in Terms of Appropriateness of Attire

Photograph	Appropriate		Male Model					Appropriate		Female Model				
	N	SR	N	SR	χ^2	df	p	N	SR	N	SR	χ^2	d	p
	(%)	(%)	(%)	(%)			(%)	(%)	(%)	(%)		f		
Lab coat	120 (62.8)	2.3	71 (37.2)	-2.3	10.69	1	0.001	128 (66.9)	3.1	63 (33.1)	-3.1	166.80	3	<0.001
Tailored dress	177 (92.4)	7.9	14 (7.6)	-7.9	123.93	1	<0.001	159 (83.4)	6.2	32 (16.6)	-6.2	202.81	2	<0.001
Scrubs	144 (75.5)	4.6	47 (24.5)	-4.6	43.00	1	<0.001	148 (77.6)	5.1	43 (22.4)	-5.1	49.79	1	<0.001
Jeans	80 (41.9)	-1.5	111 (58.1)	1.5	4.56	1	0.031	73 (38.2)	-2.2	118 (61.8)	2.2	6.02	1	0.012

Table 4 Influence of Background Characteristics on Perceptions of Photographs in Terms of Appropriateness of Attire*

Photograph	Characteristic	Pearson χ^2	Male Model			Cramer's V	Pearson χ^2	Female Model		Cramer's V
			df	p	p			df	p	
Lab coat	Education	12.00	6	0.06	0.19	24.90	9	0.003	0.23	
	PT visits**	18.59	8	0.017	0.33	24.78	12	0.019	0.22	
Tailored dress	Age	20.55	3	<0.001	0.35	17.16	6	0.009	0.23	
	PT visits	12.48	4	0.010	0.27	31.53	8	<0.001	0.31	
Scrubs	Age	7.84	3	0.05	0.21	1.34	3	0.72	0.01	
	PT visits	10.03	4	0.043	0.24	2.96	4	0.56	0.13	
Jeans	Age	12.01	3	0.007	0.26	10.13	3	0.017	0.24	
	PT visits	12.04	4	0.022	0.27	18.49	4	0.001	0.33	

*Only those background characteristics found to have a statistically significant association are presented.

**PT visits = total visits to physiotherapy over lifetime

respondents across sites was relatively balanced, as was the number of visits to physiotherapy.

As indicated in Table 2, ranking of the photographs in terms of regarding professional attire followed the same patterns for both male and female models: the lab coat was perceived as the most professional, followed by tailored dress and scrubs, and jeans were perceived as least professional. The preferred attire for both male and female models was tailored dress, followed by scrubs, then the white lab coat; again, jeans were the least preferred.

The majority of respondents perceived the tailored dress, lab coat, and scrubs as appropriate attire for both male and female models (see Table 3). Although the majority deemed jeans inappropriate for

physiotherapists of both sexes, the low values of the standardized residuals for the male model suggest that jeans do not contribute appreciably to the value of χ^2 . Age, educational background, and number of visits to physiotherapy significantly influenced respondents' perceptions in terms of appropriateness of attire, although the Cramer's V coefficients represent only low to moderate strength of those influences (see Table 4). In comparison to their younger counterparts, more respondents aged 56 years and above perceived scrubs on the male model as appropriate. The majority of younger respondents (<36 years of age) perceived jeans as appropriate attire for both male and female models, whereas the opposite was true for respondents in the older age categories. Educational level had a significant effect on only one

Table 5 Respondents' Level of Agreement with Statements about the Attire of Physiotherapists

Statement	Agree		Neutral		Disagree		χ^2	df	p
	N (%)	SR	N (%)	SR	N (%)	SR			
The way a physiotherapist dresses is important to me.	97 (50.8)	4.2	62 (32.5)	-0.2	32 (16.8)	-4.0	33.25	2	<0.001
I would be more likely to trust and follow my physiotherapist's advice if they dressed appropriately.	91 (47.6)	3.4	49 (25.7)	-1.8	51 (26.7)	-1.5	16.87	2	<0.001
It is appropriate for my physiotherapist to wear jeans while treating me.	39 (20.5)	-3.1	62 (32.5)	-0.2	90 (47.1)	3.2	19.78	2	<0.001
I think it is appropriate for my physiotherapist to wear jeans on 'casual day'.	129 (67.5)	8.2	41 (21.5)	-2.8	21 (11.0)	-5.4	103.71	2	<0.001

SR = standardized residuals (values >2.0 in boldface type are considered important)

Table 6 Influence of Background Characteristics on Level of Agreement with Statements about the Attire of Physiotherapists*

Statement	Characteristic	Pearson χ^2	df	p	Cramer's V
The way a physiotherapist dresses is important to me.	PT visits	19.47	10	0.039	0.23
It is appropriate for my physiotherapist to wear jeans while treating me.	Age	40.28	9	<0.001	0.38
	PT visits	28.07	15	0.018	0.22

*Only those background characteristics found to have a statistically significant association are presented.

PT visits = number of lifetime visits to physiotherapy

mode of attire: many college- or university-educated respondents found the lab coat inappropriate for the female model but not for the male model. The number of visits to physiotherapy had a significant influence on all modes of attire: respondents with <50 visits were more likely to consider the lab coat and scrubs appropriate and jeans inappropriate than those who had accumulated more visits. The few respondents who found tailored dress on both male and female models inappropriate were generally >56 years of age and with <50 visits. The sex of respondents and the site at which they were attending physiotherapy did not influence their perceptions of the appropriateness of attire.

Overall, the majority of respondents agreed with the statement that their physiotherapist's attire was important to them (see Table 5). However, the proportion of neutral responses increased in the category of respondents with >10 visits to physiotherapy (see Table 6). The statement that attire influenced trust and willingness to follow physiotherapy advice was supported by almost half of the respondents (see Table 5). Findings about the inappropriateness of jeans from Section 1 data were corroborated by the responses to the statement "It is appropriate for my physiotherapist to wear jeans while treating me": overall, 47% disagreed with the statement (see Table 5), and the frequency of disagreement increased with increasing age and decreased with increasing number of visits to physiotherapy (see Table 6). Interestingly, there was substantial support (68% of respondents) for the appropriateness of wearing jeans on "casual day" (see Table 5), independent of age or number of visits. The sex of respondents, the clinic site, and respondents' educational background did not have

a significant influence on level of agreement with any of the four statements.

DISCUSSION

This is the first study, to our knowledge, that set out to investigate the preferences of patients regarding the attire of physiotherapists. The response rate of 63.7% for our study exceeded the minimum recommended in published guidelines.²³ Comparison of the respondents' demographic data with patient registration information collected on patients at the three publicly funded clinics indicated that the respondents fit the general patient profile in terms of age and sex. Lack of registration data on educational level precluded comparison with an unexpected characteristic of our sample: two-thirds of respondents were college or university educated.

The lab coat was ranked by respondents as the most professional attire. Professionalism is a multifaceted construct that, in the health care field, encompasses the traits of competence; engagement (e.g., communication skills and empathy); reliability; dignity toward patients, peers, and self; placing the patient above self; and concern for quality of care.²⁴ In more practical terms, it is "an image that promotes a successful relationship with the patient,"^{7(p.909)} such that the patient feels confident in the capabilities of the health care provider. Although professionalism is the single most important trait that can be enhanced by dressing appropriately,²⁵ professional attire is only one means of achieving a successful relationship. In the present study, respondents made a clear distinction between attire that they perceived as professional and attire that they preferred. In contrast

to the findings from medical literature, which indicate the lab coat as both most professional and most preferred,^{7,9,10,26,27} respondents in the present study unambiguously preferred tailored dress, despite regarding the lab coat as most professional. Reasons for these contrasting perceptions cannot be ascertained from our study's findings. However, it seems reasonable to speculate that differences in both personality traits of professionals and patient-physician and patient-physiotherapist relationships may be contributing factors. In terms of personality type, the profile of physiotherapists²⁸ most closely resembles that of paediatric specialists,²⁹ for whom relaxed standards of dress have been found to be more acceptable to patients than they are for other medical specialties.¹⁵

In considering patient-professional relationships, the lab coat has been associated not only with competence and concern³⁰ but also with a sense of unfriendliness, inequality, and a less relaxed relationship.²⁰ These associations may be desirable in maintaining a formal rapport during physician-patient interactions, but they do not foster effective physiotherapist-patient relationships. Physiotherapists often spend considerable time engaged in hands-on interactions with their patients, thus providing ample opportunity to convey other above-mentioned aspects of professionalism. Extent of exposure to this therapeutic interaction appears to influence patients' perceptions of the appropriateness of attire. The study found that perceived appropriateness of lab coat and scrubs decreased and perceived appropriateness of jeans increased with an increasing number of physiotherapy visits. Indeed, Brosky and colleagues found that more formal attire of dentists enhanced first impressions and had a significant impact on the confidence levels of patients,⁷ whereas in a study by Brennan and associates patients indicated that less formal attire worn by nursing staff removed the "them and us" distinction, promoting a sense of equality and understanding and enhancing nurse-patient relationships.⁶ Thus, it appears that patients' preference regarding the degree of formality of attire is related to their level of familiarity with the health care provider.

While the more relaxed appearance of tailored attire was ranked first in terms of preference, the most informal attire (jeans) was viewed as both least professional and least preferred by the majority of respondents. Overwhelmingly in the literature, patients have reported jeans to be one of the least acceptable types of clothing that their physician can wear.^{8,26,27,31} A 1992 study found that jeans conveyed the "least happiness and intelligence" compared to other modes of attire,³² and a 1972 study reported that the wearers of jeans felt they presented themselves less positively than when they were well dressed.³³ In the recent past, however, jeans have become more fashionable and accepted by the public at large. This trend may help to explain the age-related

differences in perception of the appropriateness of jeans: the majority of respondents under the age of 36 perceived jeans to be appropriate, in opposition to their older counterparts. Further, older patients tend to be more conservative in their expectations of what constitutes proper professional attire.^{8,31} A recent study indicated that older patients consistently chose the white uniform for nurses, whereas younger patients, representing Generation X, Generation Y, and Baby Boomers, preferred a uniform with a print.³⁴

Casual days, originally introduced in the late 1950s as an attempt to increase morale in the white-collar office environment and later developed as a means of raising money for the United Way,³⁵ have become relatively commonplace across all lines of work; 87% of American companies allow casual attire at least once a week.³⁶ In our study, there was clear support for the appropriateness of wearing jeans on "casual day." However, given the widespread perception of the inappropriateness of this mode of attire in general, it is probably advisable for professionals to indicate clearly, via posters or buttons, that jeans wearers make a charitable donation on casual day.

The positive association found in our study between physiotherapists' attire and patients' trust and willingness to follow advice has been previously reported in relation to physicians' attire.³⁷ However, the observed frequencies of neutral (26%) and negative (27%) responses regarding this association suggest that many patients dissociate quality of care from the appearance of the physiotherapist. In contrast, Taylor reported that parents of children admitted to a paediatric hospital were twice as likely to attribute competence to the physician wearing formal dress than to the physician wearing surgical scrubs.³⁰ Nevertheless, attitudes and mannerisms have been shown to have a greater impact than attire on patient satisfaction,³⁸ and several studies have demonstrated a lack of influence of physicians' attire on patients' satisfaction with care and perceptions of physician competence, particularly among patients with post-secondary education.^{8,20,38} Educational background influenced only one aspect of the present study: college- or university-educated respondents tended to perceive the lab coat as inappropriate in the case of the female model but not in the case of the male model. We have no explanation for this finding, which conflicts with a previously reported observation that greater latitude is afforded to female physicians than to male physicians in terms of acceptability of attire.³⁷

Study Limitations

The design of the present study—a self-completed questionnaire administered to a non-random sample of respondents—limits the generalizability of the results. The modes of attire represented in the photographs

were necessarily limited. More controversial aspects of appearance, such as exposed midribs, body piercings, and tattoos, were not considered. Furthermore, because our study was confined to patients attending publicly funded outpatient physiotherapy clinics, the results may not be applicable to other practice settings. Given the age-related differences in perceptions revealed by the present study, different findings would probably have resulted if the questionnaire had been distributed in settings with greater representation of older populations, such as extended care facilities or nursing homes. Similarly, the previously reported concern for easy recognition of health care professionals³⁻⁵ suggests that administering the questionnaire in in-patient settings, where patients encounter a diversity of health care providers, would undoubtedly yield different results. Finally, the fact that the readability level of the questionnaire (grade 8.6) exceeded the grade level of seven respondents may have affected the results.

CONCLUSIONS

In completing a questionnaire on the attire of physiotherapists, patients attending outpatient physiotherapy clinics made a clear distinction between what they perceived as professional (lab coat) and what they preferred (tailored dress). Also, although jeans were considered by the majority of respondents to be inappropriate attire for physiotherapists, the majority supported the wearing of jeans on "casual day." The significant influences of aspects of the respondents' profiles, particularly age and number of lifetime visits to physiotherapy, on perceptions of physiotherapists' attire imply limited generalizability of the results to other practice settings.

KEY MESSAGES

What Is Already Known on This Subject

The trend in Western society toward more casual attire has led to lowering of standards for professional dress and has raised questions about the impact of these lowered standards on patient-health care professional relationships. Reports on patients' perceptions of the attire of nurses, dentists, and physicians suggest that patient preferences are dependent on a number of factors, including patient age, practice setting, and specialty area of the clinician. Patients' opinions of physiotherapists' attire have not been investigated.

What This Study Adds

Respondents to a questionnaire on the attire of physiotherapists practising in outpatient clinics made a clear distinction between what they perceived as professional (lab coat) and what they preferred (tailored dress). Jeans were considered by the majority of respondents to be

inappropriate attire for physiotherapists, but most respondents supported the wearing of jeans on "casual day." Age of respondents and lifetime exposure to physiotherapists influenced these perceptions.

ACKNOWLEDGEMENTS

We acknowledge all of the receptionists in the outpatient physiotherapy departments at the Queen Elizabeth II Health Sciences Centre for their assistance in distributing the questionnaires. We also thank Dr. Brenda Beagan for her consultation on questionnaire design and analysis and Holly Kaye and Callum Steeves for permitting us to use their photos in the questionnaire.

REFERENCES

- Walsh KC. Projecting your best professional image. *Imprint*. 1993;40:46-9.
- Kalisch B, Kalisch P. Dressing for success. *Am J Nurs*. 1985;85:887-93.
- Kucera K, Nieswiadomy R. Nursing attire: the public's preference. *Nurs Manage*. 1991;22:68-70.
- Page J, Lawrence PA. Attitudes towards dress codes. *Nurs Manage*. 1992;23:48-50.
- Rowland W. Patients' perceptions of nurse uniforms. *Nurs Stand*. 1994;8:32-6.
- Brennan W, Scully W, Tarbuck P, Young C. Nurses' attire in a special hospital: perceptions of patients and staff. *Nurs Stand*. 1995;9:35-8.
- Brosky ME, Keefer BS, Hodges JS, Pesun IL, Cook G. Patient perceptions of professionalism in dentistry. *J Dent Educ*. 2003;67:909-15.
- Hennessey N, Harrison DA, Aitkenhead AR. The effect of anaesthetist's attire on patient attitudes: the influence of dress on patient perception of the anaesthetist's prestige. *Anaesthesia*. 1993;48:219-22.
- Kanzler MH, Gorsulowsky DC. Patients' attitudes regarding physical characteristics of medical care providers in dermatologic practice. *Arch Dermatol*. 2002;138:463-6.
- Menahem S, Shvartzman P. Is our appearance important to our patients? *Fam Pract*. 1998;15:391-7.
- Brandt LJ. On the value of an old dress code in the new millennium. *Arch Intern Med*. 2003;163:1277-81.
- Dobson R. Doctors should abandon ties and avoid nose rings. *Brit Med J*. 2003;326:1231.
- Pronchik DJ, Sexton JD, Melanson SW, Patterson JW, Heller MB. Does wearing a necktie influence patient perceptions of emergency department care? *J Emerg Med*. 1998;16:541-3.
- Department of Health. Uniforms and workwear: an evidence base for developing local policy. London, UK: National Health Service; 2007.
- Banerjee A. Does a doctor's dress matter? *Med J Aust*. 1988;149:168.
- Li SF, Haber M. Patient attitudes toward emergency physician attire. *J Emerg Med*. 2005;29:1-3.
- Rajagopalan M, Santilli M, Powell D, Murphy M, O'Brien M, Murphy J. Mental health professionals' attire. *Aust N Z J Psychiatr*. 1998;32:880-3.
- Fischer RL, Hansen CE, Hunter RL, Veloski JJ. Does physician attire influence patient satisfaction in an out-patient obstetrics and gynecology setting? *Am J Obstet Gynecol*. 2007;196:186.e1-e5.
- Cleather J. Head, heart and hands: the story of physiotherapy in Canada. Toronto: Canadian Physiotherapy Association; 1995.
- Ikusaka M, Kamegai M, Sunaga T, Narita N, Kobayashi H, Yonenami K, et al. Patients' attitude toward consultations by a physician without a white coat in Japan. *Intern Med*. 1999;38:533-6.
- Farr JN, Jenkins JJ, Paterson DG. Simplification of Flesch Reading Ease Formula. *J Appl Psychol*. 1951;35:333-7.

22. Portney L, Watkins M. *Foundations of clinical research: applications to practice*. 2nd edn. Upper Saddle River, New Jersey: Prentice Hall Health; 2000.
23. Bailey DM. *Research for the health professionals: a practical guide*. 2nd edn. Philadelphia: FA Davis Co; 1999.
24. Barrett TG, Booth IW. Sartorial eloquence: does it exist in the paediatrician-patient relationship? *Brit Med J*. 1994;309:1710-2.
25. Harris MB. Clothing: communication, compliance, and choice. *J Appl Soc Psychol*. 1983;13:88-97.
26. Colt HG, Solut JA. Attitudes of patients and physicians regarding physician dress and demeanor in the emergency department. *Ann Emerg Med*. 1989;18:145-51.
27. Matsui D, Cho M, Reider MJ. Physician's attire as perceived by young children and their parents: the myth of the white coat syndrome. *Pediatr Emerg Care*. 1998;14:198-201.
28. Lysack C, McNevin N, Dunleavy K. Job choice and personality: a profile of Michigan occupational and physical therapists. *J Appl Health*. 2001;30:75-82.
29. Sliwa JA, Shade-Zeldow Y. Physician personality types in physical medicine and rehabilitation as measured by the Myers-Briggs Type Indicator. *Am J Phys Med Rehabil*. 1994;73:308-12.
30. Taylor PG. Does dress influence how parents first perceive house staff competence? *Am J Dis Child*. 1987;141:426-8.
31. Dunn JJ, Lee TH, Percelay JM, Fitz JG, Goldman L. Patient and house officer attitudes on physician attire and etiquette. *J Am Med Assoc*. 1987;257:65-8.
32. Kwan YH, Farber A. Attitudes towards appropriate clothing in perception of occupational attributes. *Percept Motor Skills*. 1992;74:163-9.
33. Schneider DJ. Effects of dress on self-perception. *Psychol Rep*. 1974;35:167-70.
34. Skorupski VJ, Rea RE. Patients' perceptions of today's nursing attire: exploring dual images. *J Nurs Admin*. 2006;36:393-401.
35. McMurdy D. Cross (purpose) dressing. *CA Magazine*. 1998:9.
36. Boehle S, Dobbs K, Goldwasser D, Gordon J, Stamps D. The demise of casual day: blame it on the stretch pants. *Training*. 2000;37:24.
37. McNaughton-Filion L, Chen JSC, Norton PG. The physician's appearance. *Fam Med*. 1991;27:208-10.
38. Baeovsky RH, Fisher AL, Smithline HA, Salzberg MR. The influence of physician attire on patient satisfaction. *Acad Emerg Med*. 1998;5:82-4.