

ORIGINAL RESEARCH

IJPHY

PHYSIOTHERAPISTS' ATTIRE: DOES IT AFFECT PATIENTS' COMFORT, CONFIDENCE AND OVERALL PATIENT-THERAPIST RELATIONSHIP?

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ABSTRACT

Background: Attire is one of the major determinants of appearance and a key element of non-verbal communication that plays a critical role in the establishment and sustainability of therapeutic relationships. This study aimed to determine the patients' preferred physiotherapists' attire and the effect of physiotherapists' attire on patients' confidence, comfort and patient-therapists relationship.

Methods: A questionnaire was used to collect data in this cross sectional study design. Patients (N= 281) attending outpatients physiotherapy clinics in six selected tertiary health institutions in North-eastern Nigeria completed a questionnaire consisting of two sections. Section one solicited sociodemographic information while in section two patients rated their level of confidence and comfort with physiotherapists based on a photo pictures of a male and a female physiotherapists models in four different attires. Descriptive statistics were performed to characterize participants and the differences in patients' confidence and comfort level by different types of attire were assessed using chi-square. The correlation between physiotherapists' attire and patient-physiotherapist relationship was determined using spearman rank correlation.

Results: Overwhelming majority of the participants were more comfortable (91.1%) and more confident (89.0%) with the physiotherapists dressed in white coat, while they were less comfortable and less confident when their therapists are dressed in suit, native or casual wear. Positive patient-therapist relationship was observed with white coat dressed physiotherapists; while the relationship with business, native and casual wears were inverse.

Conclusion: The study supports for continuing recommendation of lab coat as a professional dressing for physiotherapists in Nigeria and affirms the importance of professional dressing in patient-therapists relationship.

Keywords: patient-therapist relationship; professional appearance; patient trust; therapist dress

Received 10th August 2015, revised 20th August 2015, accepted 04th September 2015



www.ijphy.org

DOI: 10.15621/ijphy/2015/v2i5/78219

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INTRODUCTION

Proper appearance by a professional is important in building and sustaining a healing relationship with patients/clients and a general presumption is that health professionals must always present themselves in a professional manner.¹ Attire is a symbol of professionalism^{1,2}, is believed to foster mutual respect between client and health professionals³ and can enhance patient care.⁴ What a health practitioner wear may inspire confidence on the part of the professional and patient^{5,6}, and it can also differentiate caregivers.⁷

Historically physiotherapists' clinical dress was a uniform wear of white dress¹ and the same style of belt buckles and head dresses for females as their nursing colleagues.⁸ The white coat used by physiotherapist today has served to create a distinctive professional brand^{9,10}, act as protective clothing, separate work from non-work time, create patient confidence in competence and trustworthiness, while it can also create a sense of oppression and control.^{1,11} Nevertheless, divergent reports on the benefits or influence of health professionals dressing on patient care has been found in the literature.^{12,13,14}

Positive correlation between the white coat attire and the patients' confidence in his/her physician's competence has been reported^{15,16,17} and the white coat has also been reported to make the patient view the doctor as friendly, approachable, more authoritative, trustworthy and understanding.⁵ Nurses' uniform has been reported to foster a relaxed, approachable, clinical, authoritative, confident environment for the patient, and also confer formality and friendliness of the nurses.⁶ Among physiotherapists in Canada, the lab coat was perceived as the most professional, followed by tailored dress and scrubs and jeans was perceived as least professional.¹⁸ Overall, formal attire is generally attractive and is regarded as important in patient care.⁶

It has been observed that patients' perceptions on the attire of their health professional are changing.^{1,5,7,8} Increasingly in North American continent however, employees are electing to wear casual clothing considered to be lowering the standards for professional dress and thus raising questions about the impact of relaxed standard on the patient-physiotherapist professional relationship.¹⁸ In many parts of Northern Nigeria native wear is a common mode of dressing and can be worn to work. A general observation is that many health care personnel in northern parts of Nigeria and other West African countries often wear *caftan* on trousers on "casual days" such as

Fridays, and women often wear African wrapper and long below the ankle skirt underneath a lab coat on a regular basis. It is customary for dressing mode to be relaxed on weekends among health professionals even in other parts of Nigeria.

How patients perceive physiotherapist professional dressing and how the physiotherapist attire affects patient-physiotherapist relationship in a non native English country such as Nigeria is unclear. The purpose of this study was to determine how the attire of physiotherapists affects patients' confidence level, comfort level and overall relationship with physiotherapists.

METHODS

Participants

The participants were 281 adult patients with good cognitive function attending outpatients' physiotherapy clinics in 6 selected major tertiary hospitals in North eastern Nigeria. These hospitals located in 6 states are University of Maiduguri Teaching Hospital, Borno State; Now called; Federal Teaching Hospital Gombe, Gombe State; Federal Medical Centre Azare, Bauchi State; Federal Medical Centre Nguru, Yobe State and Federal Medical Centre Jalingo, Taraba State. The participants were recruited using sample of convenience. Out of the 300 questionnaires distributed, 281 were returned duly completed yielding a response rate of 93.7%.

Instruments and Procedure

A self developed questionnaire comprising of two sections was utilized for this study. Section A solicited socio-demographic information of the patients which include age, gender, marital status, number of children, religion, level of education, occupation, referral diagnosis as well as duration of physiotherapy visits. Section B consists of questions regarding patients' confidence level, comfort level and overall relationship with their physiotherapist with respect to attire. The respondents were asked to respond to a series of questions on photographs of simulated male and female physiotherapists in different attires with a stethoscope around the neck for each of the photographs.

The formal attire was white coat with shirt and tie for male model; white coat with blouse and skirt for female model. Traditional attire was *caftan* top over trousers and cap for male model and blouse wrapper and scarf for female model. Business attire was black suit on shirt and trouser with neck tie for male and women suit on shirt and long skirt for female models, whereas the casual attire was a pair of jeans and t-shirt for male model and jeans skirt and t-shirt for female model.

The questions ask whether or not the Physiotherapists attire affects the comfort or level of confidence the patient has with his/her physiotherapist. For example the participants were asked "If your physiotherapist is dressed in this outfit (referring to the different attires on the pictures) would that make you more or less comfortable talking to him/her". In another question they were asked "If your physiotherapist is dressed in this outfit would that make you more or less confident in his/her abilities". They were also asked whether their physiotherapist's clothing affect their overall relationship with him/her. The answer options were a 5-point Likert Scale ranging from (1) strongly agree to (5) strongly disagree.

These photographs were snapped by an expert photographer from the information unit of the University of Maiduguri, using a digital camera (Kodak Smart Capture with 10.2 Megapixels). The questionnaire was assessed for content and face validity by five (5) experts each with at least a master degree in physiotherapy and over 10 years working experience, and all adjudged it to be valid. Its test-retest reliability was also examined by 10 patients who were not part of the study, and the reliability coefficients range from 0.69 to 0.71. The photographs representing different attire styles worn by a male and female model are shown in figure 1.

a. Traditional attire



b. Casual attire



c. Formal (Clinical coat) attire





d. Corporate attire

Figure 1(a-d); Different types of attires

Procedure

The ethical approval of the study was obtained from the research and ethics committee of the University of Maiduguri Teaching Hospital. Prior to the distribution of the questionnaire; the prospective participants were met and approached on their clinic days. After formal introduction, their audience was sought and explanation of the study including its merits was made to participants. Participants were also informed that participation is voluntary; anonymity and confidentiality of the information given were assured. Only patients who receive physiotherapy treatment in the

Department of Physiotherapy were approached for study.

After obtaining their informed consent, questionnaires were then administered to the participants and assistance was given to those who were not able to complete the questionnaire using a standardized explanation for each item to ensure proper completion and avoid missing data. This questionnaire takes about 10 minutes to complete and participants were not provided any inducement and no such request was received.

Data analyses

All data entry and analyses were conducted using SPSS for Windows (version 21.0). Descriptive statistics of frequency, mean, standard deviation and percentages was used to summarize the socio-demographic data and the perception of the participants toward physiotherapists' attire. Proportional differences in patients' confidence and comfort level by different types of attire were explored using chi-square. The spearman rank correlation coefficient was used to determine the correlation between physiotherapists' attire and patient-physiotherapist relationship. The level of significance was set at p-value of < 0.05.

RESULTS

The age of the participants ranges from 18-81 years, with the mean age of 39.30 ± 14.60 years. More males (53.7%) than females (46.3%) participated in the study, and majority of the participants (63.3%) were affiliated to the Islamic religion. Government employees made up 39.1% (n=110) of the participants but many of them were unemployed (36.7%). A simple majority of the participants (53.4%) were attending physiotherapy clinics because of orthopedic conditions and an overwhelming majority of them (55.9%) had attended physiotherapy clinics for between 1-6 months (Table 1).

Table 1: Sociodemographic characteristics of participants

Variables	Frequency (n)	Valid Percent(%)
Gender		
Male	151	53.7
Female	130	46.3
Marital Status		
Single	99	35.2
Married	153	54.4
Divorced	15	5.3
Widowed	14	5.0
No of Children		
None	107	38.1
1-5	111	39.5
6-10	47	16.7
11-15	11	3.9
16-20	5	1.8

Religion		
Islam	178	63.3
Christianity	103	36.7
Educational Status		
Tertiary	161	57.3
Secondary	56	19.9
Primary	20	7.1
Never attended	44	15.7
Occupational status		
Government employed	110	39.1
Self employed	68	24.2
Un-employed	103	36.7
Condition		
Medicine	117	41.6
Surgery/Orthopaedics	150	53.4
Others	14	5.0
Duration of treatment		
< 1Month	86	30.6
1-6 Months	157	55.9
7-12 Months	14	5.0
> 12 Months	24	8.5

n = Frequency of variables, % = percentage of variables

Majority of the participants (61.0%, n=250) reported they were more confident in their physiotherapists when dressed in white coat, compared to 22.9% who reported more confidence when their physiotherapist dressed in corporate attire. Confidence level seems to be lowest among

the participants when their physiotherapist dressed in causal (7.8%) and traditional (8.3%) attires compared to other modes of attire ($\chi = 483.65$, $p < 0.01$) (Table 2).

Table 2: Patients confidence with their physiotherapists in different attires

Variables	More Confident		Less Confident		Chi-Square	p-value
	n	%	n	%		
White coat	250	61.0	31	4.3	483.65*	0.001
Traditional	34	8.3	247	34.6		
Casual	32	7.8	249	34.9		
Corporate	94	22.9	187	26.3		

n = Frequency of variables, % = percentage of variables; * = indicates significance at $p = 0.05$

Similarly, majority (59.2%) of the participants reported that they would feel more comfortable talking to their physiotherapist when dressed in white coat, compared to their counterparts who reported they would feel more comfortable with their physiotherapists when dressed in corporate (23.4%), casual (8.8%) and traditional (8.6%)

attires. Patients tend to report they would feel more comfortable with their physiotherapists dressed in white coat than when dressed in business, native or casual wear ($\chi^2 = 479.67$, $p < 0.01$). This is shown in Table 3.

Table 3: Patients comfort level with their physiotherapists in different attires

Variables	More Comfortable		Less Comfortable		Chi-Square	p-value
	n	%	n	%		
White coat	256	59.2	25	3.6	479.67*	0.001
Traditional	37	8.6	244	35.3		
Casual	38	8.8	243	34.1		
Corporate	101	23.4	180	26.0		

n = Frequency of variables, % = percentage of variables; * = indicates significance at $p = 0.05$

Significant correlation was found between patient-therapist relationship and the white coat, traditional attire, casual attire and corporate attire ($r=0.39$; $p<0.01$; $r= -0.28$; $p<0.01$; $r= -0.32$; $p<0.01$; $r= -0.19$; $p<0.01$ respectively), although this relationship was positive only with physiotherapist dressed in white coat (Table 4).

Table 4: Spearman correlation between Patient-physiotherapist relationship with different attire.

Variables	Overall Relationship	
	r - value	p - value
White coat	0.39	0.001*
Traditional	-0.28	0.001*
Casual	-0.32	0.001*
Corporate	-0.19	0.002*

* = indicates significance at $p = 0.05$

DISCUSSION

Participants in this study tend to be more confident about the professional abilities and image of physiotherapists in a white coat than when they wear corporate, native or casual attires. This finding is consistent with the report from other studies.^{18,19,20} It is also in line with the findings of Budny *et al.*¹⁷, which showed that professionally dressed podiatric physicians who wear a white coat inspired more confidence in 68% of their patients. It is also consistent with findings in the study by Brosky *et al.*²¹ in which 78.1% of the respondents affirmed that the formal attire of dentists made them to have more confidence in their dentists. Our findings is however, at variance with the study by Cha *et al.*²², which reported no effect of type of attire on patients' confidence in obstetrics and gynaecology setting and that of Fischer *et al.*¹³, which reported no effect of attire on patients' confidence in the physician.

The present study show that participants tend to be more comfortable with a physiotherapist adorned in a white coat than, when dressed in corporate, native or casual wear. Better comfort rating with white coat is consistent with other studies in which respondents felt more comfortable talking about their sexual, psychological and more personal matters with physicians who dress professionally.^{21,23} It is also in agreement with another study in which duty military women were more comfortable in discussing personal medical issues with a physician dressed in formal attire than physician dressed in military uniform²⁴, and still another in which patients were more comfortable with more conservative and traditional mode of dressing.²⁵

A finding of positive relationship between the white coat and patient-physiotherapist relationship

is consistent with one study which reported that patients were more willing to follow advice when the physiotherapist is dressed in a white coat.¹⁸ It is however at variance with a study by Brennan *et al.*⁷ where patients indicated that the less formal attire worn by nursing staff removed the “them and us” distinction, promoting a sense of understanding and equality, thus enhancing the nurse-patient relationship. It thus appears that the nature and extent of therapeutic interaction appears to influence patients' perception of the appropriateness of attire.¹⁸

The present study shows a link between patient-therapists relationship and dress of the physiotherapist. While an inverse relationship between patients-therapists relationship observed when physiotherapists were dressed in casual wear may be expected, negative relationship with native attire and more so with corporate wear is surprising. This finding is an indication of the symbolism of the white coat and provides insights into patients' thoughts and premium placed on white coat over other dresses. It points to a positive dimension of white coat effect in healthcare.

A priori, we compared the findings in the present study with that of Mercer *et al.*¹⁸ that investigated physiotherapy patients' perception of their physiotherapists in different attire, in Canada. Physiotherapists in the Canadian study were dressed in lab coat, business attire, traditional attire and casual attire. Similar to the order of perception on attire of physiotherapists found in the present study, the lab coat appeared to attract the best perception followed by business attire, traditional attire while the casual dress in jeans was perceived as least professional.¹⁸

Overall better perception enjoyed by physiotherapists in white coat observed in the present study and corroborated in previous studies is so perhaps because the professional dress regarded as a white coat worn by a physiotherapist may serve to create a distinctive professional brand and corporate image, limit personal expression of self, convey authority and social distance, symbolically breaking down any social taboos around touching as could be experienced. The finding supports the assertion that the white coat favourably influences patients' trust and confidence during a doctor-patient encounter and promotes an enhanced therapeutic relationship.²⁶

Study Limitations

The mode of attire represented by the photograph in the present study is not exhaustive of the possible attire combinations that can be found in clinical settings especially in this region.

Traditional attires or even a suit may also be worn under a white coat. The sole contribution of white coat to patients' perception cannot be determined as it is worn over a shirt and suit and not over other dresses. Other factors such as photographic output quality and presentation related to camera parameters and specifications with an 's' as well as photographers disposition may also affect perception as picture quality. In the present study the same camera was used throughout therefore eliminating any picture quality difference. Furthermore, the pictures were taken within 10 minutes of each other at the same place and against the same background. The distance between the photographer and the physiotherapists were kept constant, thereby mitigating picture quality difference as a confounding variable. No identifiable limitations to generalization of our findings to similar population where the dress modes are presented are therefore envisaged.

CONCLUSION

It can be concluded that participants in this study tend to be more confident and more comfortable with their physiotherapist wearing white clinical coat over a shirt and trousers with tie for men and blouse and skirt for women than when dressed in corporate attire, native wear for men or women. The result of this study suggests there is a justification for the continuation of the tradition of white coat over formal attire during clinical training.

Declaration of interests

The authors declare that they have no significant competing personal, professional and/or financial interests that might have influenced the presentation of the study described in this manuscript.

Acknowledgements

The authors would like to thank the Physiotherapy departments of the six tertiary Hospitals where the data of this study were collected for their support and contributions during the study. We would like to express our sincere gratitude to all participants for voluntarily taking part in this study.

REFERENCES

1. Chartered Society of Physiotherapy (CSP). Professionalism, Personal Appearance and the Patient Experience: Guidance for Chartered Physiotherapists, Associate and Student Members, 2009.
2. Harnett, PR. Should Doctors wear white coats? *Med J Austr.* 2001; 174:343-44.
3. DeKeyser F, Wruble AW, Margalith I. Patients voice issues of dress and address. *Holistic Nurs Pract.* 2003; 17(6):290-4.
4. Palmdottir G. Client-therapist relationships: Experiences of occupational therapy clients in rehabilitation. *Br J Occup Ther.* 2006;69(9):394-401.
5. Brase G, Richmond, J. The White-Coat Effect: Physician attire and perceived authority, friendliness, and attractiveness. *J Appl Soc Psych.* 2004;34(12):2469-81.
6. Campbell S, O'Malley C, Watson D, Charlwood J, Lowson S. The image of the children's nurse: a study of the qualities required by families of children's nurses' uniform. *J Clin Nurs.* 2000;9(1):71-82.
7. Brennan W, Scully W, Tarbuck P, Young C. Nurses' attire in a special hospital: perceptions of patients and staff. *Nurs Standard.* 1995;9(31):35-8.
8. Barclay J. In good hands: The history of the Chartered Society of Physiotherapy 1894-1994. Oxford: Butterworth-Heinemann. 1994; p. 367.
9. Turner RN, Leach J, Robinson D. First impressions in complementary practice: The importance of environment, dress and address to the therapeutic relationship. *Complementary Ther Clin Pract* 2004; 13(2):102-9.
10. Department of Health Social Services and Public Safety (DHSSPS). Regional Dress Code Policy and Recommendations on Staff Changing Facilities for Northern Ireland, 2008.
11. American Physical Therapy Association (APTA). Professionalism in physiotherapy-core values, 2004.
12. Douse J, Derret-Smith E, Dheda K, Dilworth JP. Should doctors' wear white coats? *Postgrad Med J.* 2004;80: 284-86.
13. Fischer R, Hansen CE, Hunter RL, Veloski JJ. Does physician attire influence patient satisfaction in an outpatient obstetrics and gynaecology setting? *Am J Obstetr Gynaecol.* 2007;196(2):186.e1-186.e5.
14. Koh KC, Husni S, Tan JE. High prevalence of methicillin-resistant *Staphylococcus aureus* (MRSA) on Doctors' neckties. *Med J Malaysia.* 2009;64(3):233-35.
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. *Anaesth* 1993;48(3):219-22.
16. Gledhill JA, Warner JP, King M. Psychiatrists and their patients: Views on forms of dress and address. *Br J Psych.* 1997;171:228-232.

17. Budny AM, Rogers LC, Mandracchia VJ, Lascher S. The Physician's attire and its influence on patient confidence. *J Am Podiatr Med Assoc.* 2006;96(2):132-8.
18. Mercer E, MacKay-Lyons M, Conway N, Flynn J, Mercer C. Perceptions of outpatients regarding the attire of physiotherapists. *Physiother Canada.* 2008;60(4):349-57.
19. McKinstry B, Wang J. Putting on the style: what patients think of the way their doctors dress. *Br J General Pract.* 1991;41(348):275-8.
20. Nair B, Attia J, Mears SR, Hitchcock KI. Evidence-based physicians' dressing: a crossover trial. *Med J Austr.* 2002;177(11-12):681-2.
21. Brosky ME, Keefer BS, Hodges JS, Pesun IL, Cook G. Patient perceptions of professionalism in dentistry. *J Dental Educ.* 2003;67(8):909-15.
22. Cha A, Hecht BR, Nelson K, Hopkins MP. Resident physician attire: Does it make a difference to our patients? *Am J Obstet Gynaecol.* 2004;190(5):1484-8.
23. Rehman SU, Nietert PJ, Cope DW, Kilpatrick AO. What to wear today? Effect of Doctor's attire on the trust and confidence of patients. *Am J Med.* 2005;118(11):1279-86.
24. Niederhauser A, Turner MD, Chauhan SP, Magann EF, Morrison JC. Physician attire in the military setting: Does it make a difference to our patients? *Military Med.* 2009; 174:817-20.
25. Lill MM, Wilkinson TJ. Judging a book by its cover: descriptive survey of patients' preferences for doctors' appearance and mode of address. *BioMed J.* 2005; 331(7531):1524-7.
26. Abu Bakar S. Doctor's attire and patient safety. *Med J Malaysia.* 2009; 64(3):1-3.

Citation

Adamu Ahmad Rufa'i, Adetoyeje Yunoos Oyeyemi, Adewale Lukman Oyeyemi, Raqeebah Sali Bello, & Muhammad Usman Ali. (2015). PHYSIOTHERAPISTS' ATTIRE: DOES IT AFFECT PATIENTS' COMFORT, CONFIDENCE AND OVERALL PATIENT-THERAPIST RELATIONSHIP? *International Journal of Physiotherapy*, 2(5), 677-684.