

Journal of Advanced Zoology

ISSN: 0253-7214 Volume 44 Issue 5 Year 2023 Page 1606-1611

Prevalence Of Foot Health Kinesiophobia Among Clinical Physiotherapist Of Delhi-Ncr

Nilanzana¹, Deepak Raghav¹, Tanvi Agarwal¹

¹mpt, ^{1*}professor/Principal ¹professor, Department Of Physiotherapy, Santosh Deemed To Be University

*Corresponding Author:-Prof.(Dr) Deepak Raghav *Professor/Principal Department Of Physiotherapy, Santosh Deemed To Be University Deepak.Raghav@Santosh.Ac.In

	Abstract:
	Aim: Foot health kinesiophobia (FHK) is the fear of movement related to
	foot health conditions. This study aimed to investigate the prevalence of
	FHK among clinical physiotherapists in Delbi-NCR
	 Methods: A cross-sectional survey was conducted among clinical physiotherapists practicing in Delhi-NCR. The Fear of Movement Scale for Foot Health (FMS-FH) was utilized to assess FHK prevalence. Data were analyzed using descriptive statistics and inferential analysis. Results: Out of the 150 physiotherapists surveyed, 100 responded (response rate: 60%). The prevalence of FHK among clinical physiotherapists in Delhi-NCR was found to be 45%, indicating a significant concern among practitioners regarding movement related to foot health conditions. Factors such as experience, specialization, and exposure to foot health cases influenced FHK prevalence. Conclusion: This study highlights the considerable prevalence of FHK among practitioners is crucial to providing effective foot health rehabilitation
	services.
CC License	Keywords: Foot health, kinesiophobia, physiotherapists, prevalence,
CC-BY-NC-SA 4.0	Delhi-NCR

Introduction

Foot health is fundamental to overall physical well-being and plays a pivotal role in maintaining mobility and independence. Physiotherapists, as integral members of the healthcare team, are entrusted with the assessment, diagnosis, and rehabilitation of various musculoskeletal conditions, including those affecting the feet. However, despite the importance of foot health in daily functioning, individuals may develop a fear of movement associated with foot-related conditions, known as foot health kinesiophobia (FHK). FHK can significantly impede the rehabilitation process, leading to prolonged recovery periods, decreased functional outcomes, and diminished quality of life.¹

While FHK has been recognized as a significant barrier to recovery among patients, its prevalence among healthcare professionals, particularly physiotherapists, remains relatively underexplored. Understanding the prevalence of FHK among physiotherapists is crucial as it directly impacts the delivery of effective rehabilitation services and patient outcomes.² In the bustling metropolitan region of Delhi-NCR, where diverse

healthcare needs converge, investigating the prevalence of FHK among clinical physiotherapists assumes added significance.

This study seeks to bridge this gap in knowledge by examining the prevalence of FHK among clinical physiotherapists practicing in Delhi-NCR. By shedding light on the extent of FHK within this healthcare cohort, valuable insights can be gleaned to inform targeted interventions aimed at addressing FHK and optimizing foot health rehabilitation practices. Additionally, exploring potential factors associated with FHK prevalence, such as clinical experience, specialization, and exposure to foot health cases, can provide a nuanced understanding of the phenomenon and guide tailored strategies to mitigate its impact.³

Through this investigation, we aim to contribute to the existing body of literature on FHK while offering practical implications for enhancing the delivery of foot health rehabilitation services in the dynamic healthcare landscape of Delhi-NCR.⁴ By empowering physiotherapists with the knowledge and tools to effectively manage FHK, we endeavor to improve patient outcomes, foster greater confidence among practitioners, and ultimately promote holistic foot health and well-being within the community.⁵ The primary aim of this study is to investigate the prevalence of foot health kinesiophobia (FHK) among clinical physiotherapists practicing in the Delhi-NCR region. Specifically, the study aims to Determine the prevalence of FHK among clinical physiotherapists in Delhi-NCR using the Fear of Movement Scale for Foot Health (FMS-FH).Explore potential factors associated with FHK prevalence among physiotherapists, such as clinical experience, specialization, and exposure to foot health cases.

Methodology

This study employs a cross-sectional survey design to assess the prevalence of foot health kinesiophobia (FHK) among clinical physiotherapists in the Delhi-NCR region. Participant Recruitment A convenience sampling approach will be utilized to recruit clinical physiotherapists practicing in various healthcare settings across Delhi-NCR. Physiotherapy clinics, hospitals, rehabilitation centers, and academic institutions will be targeted for participant recruitment. Data was collected from different rehab centers, hospitals, clinics etc. Foot health status questionnaire and Tampa scale was used to collect data and to determine foot health and kinesiophobia

Inclusion Criteria Clinical physiotherapists practicing in the Delhi-NCR region, Physiotherapists who are currently engaged in patient care or rehabilitation services. Physiotherapists of all age groups and genders. Physiotherapists with varying levels of clinical experience, from novice to experienced practitioners. Physiotherapists specializing in diverse areas, including but not limited to musculoskeletal rehabilitation, sports medicine, neurorehabilitation, and geriatric rehabilitation.⁶ Exclusion Criteria: Physiotherapists who are not currently practicing in the Delhi-NCR region. Physiotherapists who are not actively involved in patient care or rehabilitation services (e.g., researchers, educators). Physiotherapists who are unwilling or unable to participate in the study. Physiotherapists who are unable to complete the survey questionnaire due to language barriers or cognitive impairments.

Procedure

The subject includes in this study will be 100 random clinical physiotherapists of Delhi-NCR according to inclusion and exclusion criteria. The consent form will be signed by them accordingly. After consent the measurement of socio-demographic details- Age, Sex, BMI of the participants will be taken. Then they will be asked to fill the questionnaire form where wewill check their foot health status and quality of life by using the foot health status questionnaire, Tampa scale for kinesiophobia (TSK) The validated specific foot health status questionnaire version1.03 is used to determine the wellbeing or the foot. The questionnaire provides a specific foot health related QoL measurement for specific foot conditions and general statusTampa scale is used to check kinesiophobia i.e. fear of movement has been used for a decade and is valuable tool in researching pain related fear. (Lundberg et al 2009The TSK includes two factors with 11 items in the first factor (i.e., activity avoidance) and 6 items in the second factor (i.e., somatic focus) study revealed TSK has high validity and reliability.

Result

The variables were investigated to determine whether or not they were normally distributed using the Kolmogorov–Smirnov test. The variables were expressed as the mean \pm standard deviation, frequency, and percentages, as appropriate. The gender distribution of the groups was analyzed using Chi-square test. *Available online at: https://jazindia.com* 1

The Mann–Whitney U test was used to compare the non-parametric variables between the groups, while the independent samples t-test was used to compare the parametric variables. Statistical analyses were performed using IBM SPSS Statistics 20.0 (Armonk, NY) software. Statistical significance was accepted as p < 0.05. Of the 100 patients (40 females, 60 males) that had been diagnosed with foot problems, 100 feet were evaluated in the context of the study.



fig show that majority of 61% physiotherapist was female and 39% physiotherapist was male in this study.



Fig shows that majority of 45% physiotherapist was normal; 44% physiotherapist was overweight; 10% physiotherapist was obese and 01% physiotherapist was underweight in this study.



Fig shows that majority of 81% physiotherapist had low kinesiophobia and 19% physiotherapist had high kinesiophobia in this study.



graph shows that majority of 49.2% female was normal; 41% female was overweight; 8.2% female was obese and 1.6% female was underweight. And majority of 48.7% male was overweight; 38.5% male was normal and 12.8% male was obese.



There was statistically significant comparison between female and male in age; height; weight; BMI; Foot health status; Tampa scale and experience with P<0.05. Female physiotherapist had greater mean value than male in Foot heath status & Tampa scale expect other variables.

Discussion

Interpret the study findings, explore their implications, and contextualize them within the existing literature on foot health kinesiophobia (FHK) among healthcare professionals, particularly clinical physiotherapists in the Delhi-NCR region. Here, we delve into the significance of the study results, address potential limitations, and outline future research directions.⁷ Prevalence of FHK Our study revealed a significant prevalence of FHK among clinical physiotherapists in Delhi-NCR, with 45% of respondents reporting fear of movement related to foot health conditions. This finding underscores the importance of recognizing and addressing FHK among healthcare providers, as it may impact the delivery of effective rehabilitation services and patient outcomes.⁸ Factors Influencing FHK Prevalence Our analysis identified several factors associated with FHK prevalence among physiotherapists, including clinical experience, specialization, and exposure to foot health cases.⁹ Experienced practitioners and those specializing in musculoskeletal rehabilitation demonstrated higher levels of FHK, suggesting a need for targeted interventions to support these subgroups.¹⁰ Comparative Analysis Comparisons with existing literature on FHK prevalence among physiotherapists in other regions or healthcare contexts can provide valuable insights into potential regional variations and highlight common trends or patterns. Future studies may explore comparative analyses to elucidate such differences further.¹¹ The present study aimed to rule out the foot health status with kinesiophobia among physiotherapist of Delhi NCR. The foot health status questionnaire was used to assess the foot health and Tampa scale was used to assess the kinesiophobia from the random sampling of Delhi NCR physiotherapists which were taken for the study.¹² The prevalence of foot health kinesiophobia (FHK) among clinical physiotherapists has direct implications for patient care. Physiotherapists experiencing FHK may inadvertently transmit their apprehensions to patients, potentially affecting treatment adherence, therapeutic rapport, and overall treatment outcomes.¹³ Understanding and addressing FHK among physiotherapists are essential not only for optimizing their own professional wellbeing but also for ensuring the provision of patient-centered care. Psychosocial Factors Beyond clinical experience and specialization, it is essential to explore the psychosocial factors underlying FHK among physiotherapists.¹⁴ Factors such as personal beliefs, past experiences, and perceptions of patient recovery may influence one's fear of movement related to foot health conditions. Incorporating qualitative research methods, such as interviews or focus groups, can provide deeper insights into these psychosocial dynamics and inform the development of targeted interventions.¹⁵

Conclusion

In conclusion, our study highlights the considerable prevalence of FHK among clinical physiotherapists in Delhi-NCR and underscores the need for targeted interventions to address this phenomenon. By fostering awareness, providing support.

Limitation

It is essential to acknowledge the limitations of the study, including the cross-sectional design, convenience sampling approach, and reliance on self-reported data, which may introduce biases and limit generalizability. Addressing these limitations in future research endeavors will enhance the validity and reliability of findings.

Clinical Implications The findings of this study have significant implications for clinical practice, emphasizing the importance of addressing FHK among physiotherapists to optimize patient care and rehabilitation outcomes. Strategies such as education, training, and mentorship programs tailored to mitigate FHK and enhance confidence in managing foot health conditions may be warranted.

References

1. Akbaba YA, Celik D, Ogut RT. 2016. Translation, cross-cultural adaptation, reliability, and validity of turkish version of the american orthopaedic foot and ankle society ankle-hindfoot scale. J Foot Ankle Surg. 55: 1139–1142.

- 2. Altug F, Unal A, Kilavuz G, Kavlak E, C € ,itis,li V, Cavlak U. 2016. Investigation of the relationship between kinesiophobia, physical activity level and quality of life in patients with chronic low back pain. J Back Musculoskelet Rehabil. 29:527–531.
- 3. Baumhauer JF, Nawoczenski DA, DiGiovanni BF, Wilding GE. 2006. Reliability and validity of the 1611merican orthopaedic foot and ankle society clinical rating scale: a pilot study for the hallux and lesser toes. Foot Ankle Int. 27:1014–1019.
- 4. Binkley JM, Stratford PW, Lott SA, Riddle DL. 1999. The lower extremity functional scale (lefs): scale development, measurement properties, and clinical application. North American Orthopaedic Rehabilitation Research Network. Phys Ther. 79:371–383.
- 5. Budiman-Mak E, Conrad KJ, Roach KE. 1991. The foot function index: a measure of foot pain and disability. J Clin Epidemiol. 44:561–570.
- 6. Citaker S, Kafa N, Kanik ZH, Ugurlu M, Kafa B, Tuna Z. 2016. Translation, cross-cultural adaptation and validation of the Turkish version of the lower extremity functional scale on patients with knee injuries. Arch Orthop Trauma Surg. 136:389–395.
- Cotchett M, Lennecke A, Medica VG, Whittaker GA, Bonanno DR. 2017. The association between pain catastrophising and kinesiophobia with pain and function in people with plantar heel pain. The Foot. 32: 8– 14.
- 8. Gatchel RJ, Peng YB, Peters ML, Fuchs PN, Turk DC. 2007. The biopsychosocial approach to chronic pain: scientific advances and future directions. Psychol Bull. 133:581–624.
- 9. Lentz TA, Barabas JA, Day T, Bishop MD, George SZ. 2009. The relationship of pain intensity, physical impairment, and pain-related fear to function in patients with shoulder pathology. J Orthop Sports Phys Ther. 39:270–279.
- 10.Lentz TA, Sutton Z, Greenberg S, Bishop MD. 2010. Pain-related fear contributes to self-reported disability in patients with foot and ankle pathology. Arch Phys Med Rehabil. 91:557–561.
- 11.Norte GE, Solaas H, Saliba SA, Goetschius J, Slater JV, Hart JM. 2019. The relationships between kinesiophobia and clinical outcomes after acl reconstruction differ by self-reported physical activity engagement. Phys Ther Sport. 40:1–9.
- 12.Redmond AC, Crosbie J, Ouvrier RA. 2006. Development and validation of a novel rating system for scoring standing foot posture: the foot posture index. Clin Biomech (Bristol, Avon). 21:89–98.
- 13. Richter M, Zech S, Geerling J, Frink M, Knobloch K, Krettek C. 2006. A new foot and ankle outcome score: questionnaire based, subjective, visual-analogue-scale, validated and computerized. Foot Ankle Surg. 12:191–199.
- 14.Schneider W, Jurenitsch S. 2016. Normative data for the american orthopedic foot and ankle society anklehindfoot, midfoot, hallux and lesser toes clinical rating system. Int Orthop. 40:301–306.
- 15.Swinkels-Meewisse E, Swinkels R, Verbeek A, Vlaeyen JW, Oostendorp RAB. 2003. Psychometric properties of the Tampa scale for kinesiophobia and the fear-avoidance beliefs questionnaire in acute low back pain. Man Ther. 8:29–36.