VIEWPOINT

Korean J Health Promot 2025;25(1):37-38
pISSN: 2234-2141 • eISSN: 2093-5676
https://doi.org/10.15384/kjhp.2025.00024

Korean Journal of Health Promotion
KJHP

Plantar Fasciitis: A Continuous Challenge for Medical Professionals

Muhammad Ajmal DINA, MS, PhD[1], Anam ARSHED, MBBS[2], and Arifa JABEEN, MBBS[2]

[1]Department of Biostatistics and Epidemiology, Shahid Sadoughi University of Medical Sciences, Yazd, Iran
[2]Department of Medicine, Rahbar Medical and Dental College, Lahore, Pakistan

Dear Editor,

Plantar fasciitis (PF) is an unpleasant hurdle that medical professionals have to face on a daily basis and susceptible to a pathological condition known as PF, which represents one of the primary etiologies of heel pain. PF arises from a multifactorial pathogenesis, characterized by a biomechanical overload response to recurrent microtrauma [1]. This letter emphasizes the epidemiology, risk factors with systemic consequences of PF among healthcare workers, encouraging targeted interventions to mitigate this easily preventable occupational menace. This inflammatory condition arises due to repetitive stress upon the plantar fascia, due to excessive running, overuse, or standing for prolonged periods. It can cause unbearable pain and stand as a constant hurdle during work hours.

According to a Korean study which was done in 2020 by Lee et al. [2], a literature-based questionnaire was administered to 472 nurses at a university hospital in B city, with data collected from August 1 to August 15, 2020. The Foot Health Status Questionnaire assessed foot health conditions. Results indicated that PF (7.8%) and hallux valgus (7.0%) were the most prevalent foot disorders. Common pain relief methods included stretching, leg elevation, foot massage, and relaxation techniques. Nurses exhibited poorer foot health compared to older adults or the general population with chronic foot conditions. Younger age and a higher number of foot disorders correlated with increased pain severity and functional impairment [2].

Another cross-sectional retrospective observational design, analyzing patients diagnosed with PF in South Korea between January 2010 and December 2018. A total of 60,079 individuals who accessed healthcare at least once were included. Healthcare utilization, costs, treatment methods, and visit patterns were evaluated. Findings revealed that treated PF cases rose from 11,627 (3,571 patients) in 2010 to 38,515 (10,125 patients) by 2018. The 45- to 54-year age group represented the largest patient cohort, with a higher prevalence among women [3]. According to a nationwide study held in 2020 in Taiwan, physicians and nurses had a period prevalence of PF of 8.14% and 13.11%, respectively. The results also showed that prevalence was considerably higher in specialists such as orthopedic surgeons, and physical medicine and rehabilitation doctors, as specialists in these fields have to stand for long hours during their shifts [4].

In 2021, a study from India by Bhoir and GD [5] a simple random sample of 100 healthy nurses (70 females, 30 males) aged 20–50 years. The Windlass test was administered in both non-weight-bearing and weight-bearing positions. Pain reproduction during the test was considered a positive result, with participants indicating the pain location. Findings revealed that 21% of participants tested positive, comprising 17% females and 4% males. The study concluded that female nurses exhibit a higher predisposition to PF compared to their male counterparts [5].

As the pain extends beyond suffering, the disease follows a degenerative pattern which may result in thickening, fibrosis, and ultimately metaplasia, necrosis, and calcification of the

Received: February 25, 2025; **Revised:** March 10, 2025; **Accepted:** March 11, 2025
Corresponding author: Muhammad Ajmal DINA, MS, PhD
Department of Biostatistics and Epidemiology, Shahid Sadoughi University of Medical Sciences, Central Administration, Bahonar Sq., Yazd 8916978477, Iran
Tel: +98-35-3724-0171 Fax: +98-35-3724-0171 E-mail: ajmaljhl@gmail.com

plantar fascia. Not only this disease hinders the quality of life, a study has shown that individuals with PF are more likely to suffer from diabetes, depression as well as sleep disorders. These findings pose as a multifaceted threat to workforce sustainability as well as healthcare delivery. Hence, PF not only disrupts the daily course of life, it also spawns dangerous long-term repercussions that can cause a nosedive in productivity, competency, and efficiency.

In a hospital setting, chronic pain and mobility limitations contribute to decreased productivity. Additionally, reduced physical capacity may compromise patient care, especially in circumstances requiring rapid response.PF can easily be resolved at an early stage by using stretching exercises, orthotic footwear, and night splints before it advances and requires corticosteroid injections, extracorporeal shockwave therapy, and surgical interventions such as fasciotomy.

This is utterly avoidable and can be tackled by raising awareness among healthcare staff regarding this issue, arranging seminars, and implementing better ergonomic policies.

ORCID

Muhammad Ajmal DINA, https://orcid.org/0000-0003-2034-5084
Anam ARSHED, https://orcid.org/0009-0009-4907-8814
Arifa JABEEN, https://orcid.org/0009-0008-1986-0146

AUTHOR CONTRIBUTIONS

Dr. Muhammad Ajmal DINA had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis. Author reviewed this manuscript and agreed to individual contributions.

Writing–original draft: AA. Writing–review & editing: MAD and AJ.

CONFLICTS OF INTEREST

No existing or potential conflict of interest relevant to this article was reported.

FUNDING

None.

DATA AVAILABILITY

Data sharing is not applicable to this article.

REFERENCES

1. Rabadi D, Seo S, Wong B, Chung D, Rai V, Agrawal DK. Immunopathogenesis, early detection, current therapies and prevention of plantar fasciitis: a concise review. Int Immunopharmacol 2022;110:109023.
2. Lee EN, Kim NG, Kim SH. Foot health condition and related characteristics of nurses. J Muscle Jt Health 2020;27(3):289-97.
3. Ahn J, Yeo J, Lee SH, Lee YJ, Park Y, Goo B, et al. Healthcare usage and cost for plantar fasciitis: a retrospective observational analysis of the 2010-2018 health insurance review and assessment service national patient sample data. BMC Health Serv Res 2023;23(1):546.
4. Sung KC, Chung JY, Feng IJ, Yang SH, Hsu CC, Lin HJ, et al. Plantar fasciitis in physicians and nurses: a nationwide population-based study. Ind Health 2020;58(2):153-60.
5. Bhoir KS, GD VV. Prevalence of plantar fasciitis among nurses at a tertiary care centre in a rural area: a cross sectional study. Int J Physiother Res 2021;9(4):3900-6.