

# Foot Disorders in Nurses working in Standing Environments: Scoping Review Protocol

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## INTRODUCTION

Nurses are greatly exposed to work-related musculoskeletal disorders, which account for 60% of occupational injuries [1], namely having their feet exposed to **prolonged standing** and **walking for long distances** [2].

«Standing Environments»

- 1.7 fold-risk for **foot pain** [3];
- Foot/Ankle disorders are the **most experienced** in the last **7 days** [4];
- **More than 50%** of nurses report such disorders in the **past 12 months** [4].

Increased **incidence of lesions** like plantar fasciitis, muscle fatigue, varicose veins and oedema.

Despite this, **little is known about what types of lower extremity problems** nurses are facing during working time and **studies with an exclusive focus on feet disorders are scarce** [4].

REVIEW QUESTIONS (PCC)

What foot disorders do nurses who work in standing environments have?

Which are the main clinical parameters that characterize those foot disorders?

METHOD

JBI methodology, using **Participants Concept Context (PCC)** mnemonic.

Quantitative, Qualitative and Mixed Methods study designs - **Types of Sources**

An initial limited search in **MEDLINE (PubMed)** retrieved a total of **1761 results** and allowed to develop a **search strategy** to be applied to the proposed databases.

**Filters:** 1977 onwards; Portuguese, English, Spanish and French studies.

## REFERENCES

- [1] Tinubu, B.M.S; Mbada, C.E.; Oyeyemi, A.L.; Fabunmi, A.A. Work-Related Musculoskeletal Disorders among Nurses in Ibadan, South-west Nigeria: a cross-sectional survey. BMC Musculoskelet Disord. 2010, 11(12). Available from: <https://bmcmusculoskeletdisord.biomedcentral.com/track/pdf/10.1186/1471-2474-11-12.pdf>
- [2] Stolt, M.; Suhonen, R.; Kielo, E.; Katajisto, J.; Leino-Kilpi, H. Foot health of nurses – A cross-sectional study. Int. J. Nurs. Pract. 2017; e12560. doi: 10.1111/ijn.12560
- [3] Anderson, J.; Nester, C.; Williams, A. Prolonged occupational standing: the impact of time and footwear. Footwear Sci. 2018, 10(3): 189-201. doi: 10.1080/19424280.2018.1538262
- [4] Stolt, M.; Suhonen, R.; Virolainen, P.; Leino-Kilpi, H. Lower extremity musculoskeletal disorders in nurses: A narrative literature review. Scand. J. Public Health. 2015, 1-10. doi: 10.1177/1403494815602989

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