

Low back pain among nurses working in clinical settings of Africa: Systematic review and meta-analysis of 19 years of studies.

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Background: Nurses in Africa are arguably the most important frontline healthcare workers available in most healthcare facilities, performing a broad range of tasks. This situation is considerably important in the causation of workload. Nursing is listed among the highly risky professions for developing low back pain. The nursing profession is ranked within the top ten professions which have a great risk of low back pain.

Objective: The aim was to ascertain whether low back pain is a significant concern for nurses in African healthcare facilities.

Methods: A comprehensive literature search of different databases with no date limit was conducted from September to November 2018 using the PRISMA guideline. The quality of the included studies was assessed using a 12-item rating system. Subgroup and sensitivity analyses were performed. Cochran's Q and the I² test were used to assess heterogeneity. The presence of publication bias was evaluated by using Egger's test and visual inspection of the symmetry in funnel plots.

Result: During the period 2000–2018, nineteen studies with a total sample size of 6110 from eleven African countries were included. Among these, the lowest and the highest prevalence were found to be 44.1% and 82.7% respectively. The estimation of the prevalence rate of low back pain among nurses using the random-effects model was found to be 64.07% (95% CI: 58.68–69.46; P-value < 0.0001). Heterogeneity of the reviewed studies was I² = 94.2% and heterogeneity Chi-squared = 310.06 (d.f = 18), P-value < 0.0001. The subgroup analyses showed that the highest prevalence of LBP among nurses was from West African region with prevalence rates of 68.46% (95% CI: 54.94– 81.97; P-value <0.0001) and followed by North Africa region with prevalence rate of 67.95% (95% CI: 55.96–79.94; P-value <0.0001).

Conclusion: Even though the overall prevalence of the present study is lower when compared to the Western and Asian studies, it indicated that the prevalence of low back pain among nurses is substantial.

Biography

Ayele Semachew Kasa is an Assistant Professor conducting teaching, research and community services at Bahir Dar University, Ethiopia. He holds M.Sc. degree in Adult Health Nursing from Jimma University in 2014. Currently, he is attending his PhD in nursing at the University of Wollongong, Australia. He has more than 8 years of work experience both in clinical and higher education. He believes that working at a higher learning institutions will have its own paramount importance in drafting young, motivated and visionary change makers that would lead our future. He is participating in different leadership positions at healthcare facilities and at higher education institution. To date, he provided more than fifteen community/voluntary services and published different original research articles in a reputable international journals. He received grants from higher education institution to carry out a research work. He also received different international professional and leadership trainings.