Prevalence of Musculoskeletal Disorders and Their Impact on Quality of Life, and Functional Performance among Provincial School Teachers in Gangawata Korala Division in Kandy District, Sri Lanka

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Background: School teachers are prone to Musculoskeletal disorders (MSDs) due to the unique and wide variety of daily work tasks and duties perform repeatedly for prolonged period without adequate intervals. MSDs have a huge impact on quality of life and functional performance. Objectives: This study aimed to determine the prevalence of MSDs among school teachers in Gangawata korala division in Kandy district and to investigate their impact on quality of life and functional performance. Methodology: A descriptive cross-sectional study was conducted among 576 school teachers in Gangawata korala division in Kandy district. The Nordic Musculoskeletal Questionnaire (NMQ) was used to assess the prevalence of MSDs, while quality of life was assessed using SF-36 Questionnaire. Functional performance was assessed by the Timed Up and Go test (TUG). Results: The mean age of the participants was 45.13 ± 8.90, with males 45.30 ± 8.89 years and females 45.10 ± 8.91 years. Physical and mental quality of life were compared between teachers with MSDs in at least one body part in three regions: upper extremity, lower extremity and spinal region to teachers without MSDs in these three regions using the Mann-Whitney U test. Similarly, functional performance was compared between teachers with MSDs and teachers without MSDs in these three regions using the independent sample t-test. The prevalence of MSDs was 84.2 %, most commonly affecting the knee (49.8%), lower back (45.7%), and neck (42.7%). Functional performance scores were significantly lower in teachers with MSDs across upper extremity, lower extremity, and spinal regions ($p < 0.05$) compared to those without MSDs. Quality of life showed significantly lower Physical component summary scores in the three MSD regions, whereas Mental component summary scores were significantly higher ($p < 0.001$) in teachers with MSDs. Conclusion: This study revealed a significant prevalence of MSDs in school teachers, particularly affecting the upper body, lower body, and spine, and their negative impact on functional performance and physical quality of life. The findings emphasize the need for targeted preventive and physiotherapy-based interventions to enhance teachers' physical health and mobility.

Keywords: musculoskeletal disorders, functional performance, quality of life, school teachers, prevalence