Title: Muscular-skeletal disorders amongst staff in a referral hospital in Uganda.

First Author: PI. Beatrice Amuge 1
+256752 651197

Other Authors: Namirimu Sylvia 2
Nabacha Oliva Norah 2

Background: Muscular-skeletal disorders include a wide range of inflammatory and degenerative conditions affecting the muscles, tendons, ligaments, joints, peripheral nerves, and supporting blood vessels with ache, pain and discomfort. It is one of the main health problems among healthcare workers related to physical workloads raising the possibility of a higher prevalence of serious work related musculoskeletal disorders, with the nursing population at particularly high risk and accounting for a big percentage of the reported occupational injuries. Muscular-skeletal disorders are reported to significantly impact on quality of life and cause lost work time or absenteeism.

Purpose of the study: To assess the muscular-skeletal disorders among nurses working in a referral hospital in Uganda, in order to design strategies to address the problem.

Methodology: A descriptive cross-sectional design was used. As nurses are the majority, the study focused on them as a population, with the assumption that the other members of the interprofessional team are at the same risk. A sample size of 204 (160 Diploma Nurses/Midwives and 44 Certificate Nurses/Midwives) was selected using random sampling methods among 638 Diploma Nurses/Midwives and 174 Certificate Nurses/Midwives. Pretested semi-structured self-administered questionnaires were used to collect data. Result were analyzed and presented using text, tables and figures. Ethical issues were observed.

Results: Prevalence of MSDs among nurses and midwives was 701/1000 and 598/1000 for muscles and bones respectively. Causes and predisposing factors identified, included workload being the majority (n=56/157; 29.4%), standing for long hours during procedures (n=46/157; 24.2%) and others (n=25/204; 12.3%) such as working for many years in busy wards, pushing immovable equipment and lifting heavy patients/sundries.
Major preventive measures mentioned were: ensuring adequate staffing (n=110/204; 52.9%), routine changing of nurses out of busy wards (n=25/204; 12.3%), conduct continuing medical education on proper patient handling and lifting (n=16/204; 7.8%); improving working conditions (n=16/204; 7.8%), and reducing working hours (n=15/204; 7.4%).

**Conclusion:** There is a high prevalence of muscular-skeletal disorders among nurses working in a referral hospital in Uganda, of which the major causes are preventable. The assumption is that it applies to other members of the interprofessional team as well.

**Implications:** A follow-up study should focus on the interprofessional team members. Strategies should derived from this study to change practice and to inform policy. Use of appropriate technology for lifting of heavy equipment and sundries, procurement of good functioning and mobile equipment, and raised or adjustable beds should be available. In service training on prevention of muscular-skeletal disorders should continue.

**Keywords:** Muscular-skeletal disorders, healthcare workers, prevalence

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**Ethical approval:** This was done by the Institutional Review Board-Committee (IRB) for Mulago National Referral Hospital

**Preference:** Oral presentation