

Measuring physical disability and associated health conditions among a group of urban dwelling community residents in Sri Lanka using International Classification of Functioning, Disability and Health (ICF)

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Introduction:

Physical disability is a complex, dynamic and a multidimensional issue. Physical disability has complex relationship with various health conditions. Generally, single or multiple health conditions may interact with personal and environmental factors to produce a physical disability. However, statistics on disability and associated health conditions are lacking worldwide.

Objective:

The objective of the present study was to describe the prevalence of physical disability and health conditions associated with physical disability.

Method:

A community based descriptive cross sectional study was carried out among 2460 adults aged 18 to 59 years selected using cluster sampling in Kandy Municipal Council area in Central Sri Lanka. Physical disability was defined for the present study using International Classification of Functioning, Disability and Health (ICF). Physical disability was measured using a clinical examination and World Health Organization Disability Assessment Schedule II. An interviewer administered questionnaire was administered to obtain demographic and socioeconomic data and associated health conditions information. Informed written consent was obtained from all study participants and ethical approval was granted by the ethical review committee of University of Peradeniya.

Results:

There were 103 persons with physical disability with a physical disability prevalence of 4.2% (95% CI: 3.5%-5.1%) in the community. Physically disability was highest among 40-59 age group (6.5%, n=64, p<0.05). Physical disability among females (5.5%, n=73) was higher than males (2.7% , n=3, p<0.05). Further, physical disability was higher among unmarried (8.5%, n=14) compared to married (3.6%, n=82, p<0.05). The major health conditions associated with physical disability were rheumatological disorders (63.1%, n=65, prevalence=2.6%, 95% CI=2.0-3.2) followed by orthopaedic conditions (12.6%, n=13, prevalence=0.5%, 95% CI=0.2-0.8), congenital abnormalities (11.7%,n=12, prevalence=0.5%, 95% CI=0.2-0.8), neurological disorders (5.8%, n=6, prevalence=0.2%, 95%CI: 0.02-0.38), infections (5.8%, n=6, prevalence =0.2%, 95%CI: 0.02-0.38) and miscellaneous(1%,n=1, prevalence=0.04%, 95%CI=-0.04-0.12). More females (71.2%, 52) had rheumatological conditions associated physical disability than males (43.3%, n=13). Among all age groups the highest proportion of physical disability reported was associated with rheumatological conditions. It was 50.0%, 60.9%, 59.3%, and

73.0% among 18-29, 30-39, 40-49 and 50-59 year age groups respectively. Trauma was associated with physical disability among 13.6% (n=14) who had physical disability (prevalence=0.6%, 95% CI=0.3-0.9). Majority of traumatic injuries was due to road traffic accidents (42.8%, n=6, prevalence=0.2%, 95%CI=0.0-0.4) followed by falls (42.%, n=6, prevalence=0.2%, 95%CI=0.0-0.4), war injury(7.2%, n=1, prevalence=0.04%, 95% CI: -0.04-0.12) and sports injury(7.2%, n=1, prevalence=0.04%, 95% CI: -0.04-0.12).

Conclusions and recommendations:

Accordingly, non-communicable disease/health conditions are commonly associated with physical disability status of adults in Sri Lanka and among them rheumatological disorders were the leading health condition associated with physical disability. Therefore specific health condition based disability prevention programmes targeting specific age and sex groups need to be implemented in Sri Lanka.