



Correlation between Lower Extremity Function and Quality of Life of Athletes with Lower Limb Pain

Sanka Theekshana Thebuwanaarachchi ^{ab*}, Sampath Gunawardena ^c,
Y.H.S. De Silva ^{ab}

^a Sports and Exercise Medicine Unit, Teaching Hospital, Karapitiya.

^b Sports Physicians' Panel, International Olympic Committee, Switzerland.

^c Department of Physiology, Faculty of medicine, University of Ruhuna.

*Corresponding author: sankatheekshana@yahoo.com

ABSTRACT

Assessment of functional ability is a useful parameter of overall health and is frequently assessed in clinical practice to ensure the athletes' lower extremity function (LEF). It is directly linked to the quality of life (QoL) of individuals, and its assessment is very useful in clinical practice. The Sinhala version of the Lower Extremity Functional Scale (S-LEFS) is one of the most extensively used scales in Sri Lanka. It consists of five possible numeric response categories ranging from 0 to 4 for each of its 20 questions, for a total mark ranging from 0 (poor) to 80 (excellent) points. Higher values indicate optimum lower limb function. WHOQOL-BREF is a widely used tool for assessing generic QoL across four domains: physical capacity, psychological attributes, social collaboration, and the living environment. Each item is rated on a five-point scale. The score ranges from 0 to 100, and the higher value indicates a higher level of QoL. The study aimed to evaluate the correlation between LEF and QoL of athletes with lower limb pain who attend the sports and exercise medicine clinic of Teaching Hospital Karapitiya (THK). Two questionnaires were administered among the 112 consecutive athletes with lower limb pain who presented to the sports and exercise medicine clinic of THK after obtaining ethical clearance from the ethics review committee of the Faculty of Medicine, University of Ruhuna. Pearson's correlation was used to identify the correlation between the total scores of questionnaires. The correlation between the total score of S-LEFS and WHOQOL-BREF was weak ($r = 0.28$, $p = 0.003$). The correlations observed between the total score of S-LEFS and the domain scores of WHOQOL-BREF also ranged from weak to non-significant correlations: physical ($r = 0.39$, $p = 0.000$), social ($r = 0.20$, $p = 0.032$), psychological ($r = 0.16$, $p = 0.075$) and environmental ($r = 0.09$, $p = 0.327$). The correlation between the total score of S-LEFS and WHOQOL-BREF was weak.

Keywords: Lower Extremity Function (LEF), Quality of Life (QoL), The Sinhala version of the Lower Extremity Functional Scale -(S-LEFS), Teaching Hospital Karapitiya (THK), World Health Organisation Quality of Life (WHOQOL-BREF)