ABSTRACT

Thesis title:

Work related musculoskeletal disorders in professional ballet dancers

Objective:

The high demands of the ballet dancers' profession are reflected especially within the individual dancer's musculoskeletal body system which is repeatedly exposed to a physical load that is specific for classical dance. The objective of this thesis is to find out what are the work related musculoskeletal disorders ("WRMD") in dancers who work in the Czech Republic, what risk factors prevail and which preventive strategies are applied to avoid the occurrence of WRMD.

Methods:

The stated objective was achieved by means of a questionnaire survey, during which randomly selected women/young adults with vocational training in ballet who are/were professional ballet dancers voluntarily filled in a questionnaire. In total, 56 ballet dancers within the region of the Czech Republic took part in this survey. The questionnaire consisted of open and closed questions and its conception was based on the Nordic Musculoskeletal Questionnaire ("NMQ"), with selected questions adapted to the specifics of the ballet profession. The first part of the questionnaire consisted of questions related to sociodemographic data, the next part aimed to gather data on the musculoskeletal disorders suffered and preventive strategies applied and the last part was focused on musculoskeletal disorders in specific parts of the body and related problems in detail. Collected data were analysed and tables with graphs generated using the MS Excel (Windows 10) functions. Program R was used to obtain statistical analysis results.

Findings:

Of the participants, 77% suffered some injury or illness of their musculoskeletal system in the past, 68% of the dancers stated that they already experienced WRMD problems. During the last 12 months, 41% of the participants suffered WRMD in the neck area, 38% in the area of ankle/foot, 32% in the hip area, followed by the areas of upper and lower back, shoulders, knees, wrist/hand and elbow. Of all the participating dancers, 51% replied that the longest time their WRMD lasted within the last 12 months was 3 – 7 working days

and 90% of the dancers suffering WRMD did not go on sick leave. The most common WRMD symptoms are pain and limited range of movement together with stiffness. The ballet profession risk factors most often selected by the participants were task repetition/repetitive movements and continuing to work even when injured or in pain. Almost 100% of respondents most often engage in warm-up and stretching before dance performance as a preventive strategy. Almost 50% of participants responded that they sometimes take regular breaks to relax and to restore strength and/or choose a technique which would not provoke pain or at least does not worsen the one existing.

Keywords:

ballet dancer, ballet, dance, musculoskeletal disorders, injury, pain, physiotherapy, dance and occupational health, WRMD, NMQ