

## **Abstract**

### ***PLAYING SAXOPHONE AND ITS POTENTIAL HEALTH RISKS***

**Objectives:** Main purpose of this study is to provide comprehensive review of health issues related to saxophone playing. The aim of this study is to collect available resources focused on saxophone players teaching methods, analyse them and compare them with existing findings of medical science. Also to try to find answers to asked research questions and to verify or disprove stated hypotheses, on the basis of acquired datas and principles eventually trying to arrange some possible outlines to complement teaching methods or preventative-compensational excercises for saxophone players.

**Methods:** Method of this thesis is literature research using available Czech and foreign literary resources. For this purpose there have been used electronic archives as Pubmed, Ebsco, Springer, Wiley and Science Direct, monographic publications and scholarly papers from periodicals. This work is divided into few main parts. Introductory part contains basic review of health issues related to instrumental musicians, methodics contained in saxophone schools written in the Czech language, aims and methods of this thesis. Theoretical part is more widely focused on methodics, principles and mechanics of saxophone players' education. The main part is dedicated to possible health risks and diseases potentially related to instrument playing. Following part considers eventual effect of playing position on body posture, relationship between respiratory and postural systems and proposing of practical approaches to these problems and following conceivable studies is mentioned there as well.

**Results:** On the basis of the results acquired in listed studies, it is clear that professional instrumental musicians are at a higher risk of developing a

neuromusculoskeletal disorders according to specifics of movements, mechanics and severity of higher musical skill demands. Couple of studies are stating that more than 50% of the neuromusculoskeletal disorders occur among musicians and are related to playing their instrument. There are evidence confirming this fact. Among another groups of mentioned disorders related to this issue are neurological, dermatological, visual, acoustical areas. These disorders are also classified as occupational diseases/injuries. Directly in context with saxophone playing literature mentions musculoskeletal disorders, higher risk of postural, neurological, dermatological, acoustical and visual disorders. There are also mentioned health risks related to the rapid intrathoracical pressure changes. There have been no references pointed to these health issues in all of the four mentioned written saxophone methodics. According to these facts there is a considerable need for increasing the level of education, and prevention.

**Conclusion:** Considering the low number of studies focused directly on the group of saxophone players, any generalising conclusions can not be obtained. Further research in this domain is recommended.

**Keywords:** woodwind instruments playing, saxophone, health problems, locomotor system, neuromusculoskeletal disorders