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Title: **Profiling musculoskeletal disorders arising from occupational exposure in order to establish exposure-response relationships.**

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Musculoskeletal disorders (MSDs) are conditions that occur over a period of time and affect the nerves, tendons, muscles, joints and ligaments. Occupational exposure deals with a more specific aspect of musculoskeletal disorders called work related musculoskeletal disorders (WRMSDs). Since the year 2000, researchers have discovered a dramatic rise in the number of MSDs reported by individuals. Information about musculoskeletal health in Trinidad and Tobago is limited. Therefore this research project aims to contribute information about the status of musculoskeletal health in the population and also some of the causal factors of these disorders. This is important because it can lead to a reduction in the MSDs once the causal factors are known and corrected. As such, MSDs arising from occupational or social exposure were profiled in order to establish exposure-response relationships. It is the hope of this group that, through this work and the work of our colleagues in this area, means might be discovered to cope with and mitigate this growing crisis. To this end, two types of sources were helpful; primary and secondary data.

Over a six-week period, primary data, in the form of patient records from the Eric Williams Medical Sciences Complex (EWMSC) at Mount Hope General Hospital was gathered by the three-member group for analysis to represent the community. Additionally, data from the Occupational Health and Safety Division (OHSD) was also analyzed to represent the industry.

The three most common disorders in the community were Fractures, Osteoarthritis and Cervical Spondylosis with values of 31%, 15% and 13% respectively. Fractures frequently occurred in the age group 20 -29 and 50-59. Osteoarthritis occurred in patients over 40 years. There was evidence of Cervical Spondylosis occurring in the age group 20-29 years but a higher prevalence of this disorder was observed in patients over 50 years. The data for industrial accident from the OHSD considering the relationships between type of accident and fatality showed that non-fatal accidents were 93% whereas the fatal accidents were 7%. It was concluded from the EWMSC data that Osteoarthritis and Cervical Spondylosis are age related musculoskeletal disorders. The conclusion drawn for the OHSD data was that there were more non-fatal accidents than fatal but the high percentage of non-fatal accidents has a significant impact on the productivity of the company and the possibility of an increase in chronic disorders within the society.