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Prevalence Of Musculoskeletal Disorders (Msd's) And Stress Among College Going Health Professional Students.

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Abstract:

Background:

the prevalence of musculoskeletal disorders (MSDs) and stress among college-going health professionals. The study provides an overview of the contributing factors, consequences, and preventive measures associated with these prevalent issues.

Methodology:

A total of 201 healthcare professional students were selected with different questionnaire. The data were collected by trained students using a standardizedNordic questionnaire and 10 -k questionnaire.

Result

In this study, 201 subjects were involved, and female contributed to 56.57% ofthem. The mean age was 22.67 (± 1.294), mean height was 161.4 (± 6.619),andthe mean weight was 56.73± 5.616) among these participants.

Conclusion

The prevalence of musculoskeletal disorders and stress among college-going health professionals is a significant concern that requires attention from educators, healthcare institutions, and policymakers. By implementing preventive measures and promoting a culture of well-being, we can support the physical and mental health of future healthcare providers.

Keywords: Musculoskeletal disorders, stress, college students, health professionals, prevalence, preventioN

Introduction

Health professionals, including students in training, are susceptible to musculoskeletal disorders (MSDs) due to the physical demands of their profession and high levels of stress associated with academic and clinical responsibilities.[1] Thisinvestigates the prevalence of MSDs and stress among college-going health professionals and explores the various factors contributing to these conditions.Musculoskeletal disorders (MSDs) represent a significant public health concern worldwide, affecting individuals across various age groups and occupations. Among the demographic most vulnerable to MSDs are college-going health professionals, including medical, nursing, and allied health students. These individuals are exposed to prolonged periods of studying, clinical rotations, and demanding coursework, which often involve repetitive tasks and poor ergonomic practices. As a result, they face an increased risk of developing MSDs compared to their peers in other fields.[2]

The prevalence of MSDs among college-going health professionals has garnered growing attention in recent years due to its implications for both individual well-being and professional practice. Studies have consistently reported high rates of MSDs among this population, with common sites of affliction including the neck, shoulders, lower back, and wrists.[3] These conditions not only cause physical discomfort but also have the potential to impact academic performance, quality of life, and future career prospects.[4]

Understanding the prevalence and associated factors of MSDs among college-going health professionals is essential for developing targeted interventions and preventive strategies. By identifying the root causes and risk factors contributing to MSDs, educators, healthcare institutions, and policymakers can implement effective measures to mitigate their impact and promote the long-term health and productivity of future healthcare providers.[5]

In this study, aim to provide a comprehensive review of the prevalence of musculoskeletal disorders among college-going health professionals. We will examine the contributing factors, consequences, and preventive measures associated with these conditions, drawing upon the latest research and evidence in the field.

Methodology

A cross sectional study was performed at Shree Krisha medical college and hospital.Thisstudy employed a cross-sectional study to measure the outcome (MSD pain/discomfort) and any attribute, characteristic or exposure the nursing population experiences that increase the likelihood of developing work-related musculoskeletal disorders (WRMSDs). The presence or absence of both the exposure and the outcome (MSD pain) were determined at the same time point. The selected participants for the study were assessed for their exposures and outcomes by the investigator. The selection of subjects for the study population was based on inclusion and exclusion criteria.Inclusion and Exclusion Criteria Studies reporting the prevalence of musculoskeletal disorders among college-going health professionals were included[6], Only studies published in English were considered for inclusion to ensure comprehension, Articles focusing on specific professions within healthcare (e.g., medicine, nursing, allied health) were prioritized, Studies focusing on other populations or those not directly related to the topic were excluded.

PROCEDURE

Socio-demographiccharacteristic (age,gender, studyyear,weight, heigh tand educational degree Standardizedanalys is ofthequestionnaireformusculoskeletalpaintoevaluate MSD. Used to assess and analyze the symptoms of themusculoskeletalsystemEvaluation of psychological stress through k-10. Kessler psychologicaldistressscale(k10)use to assess participantsmentalconditionsbyprovidingten responses where each issue has 5 points based on the likert scale thatvary from “none of the time” to “all the time”. The lowest score thatpresentedisten and the highestscoreis 50 and rangesfrom10 to 50follows; healthy individual less than 20, low stress is 20-24, moderate stressis25-29, and severe stress is 30-50. Another questionnaire use in this study is the standardized Nordic question aireappliedtoassessandanalyzemusculoskeletal symptoms.

OTUCOMES MEASURES

Prevalence of Musculoskeletal Disorders (MSDs):The primary outcome measure is the prevalence of MSDs among college-going health professionals.Prevalence rates will be calculated as the proportion of individuals diagnosed with MSDs among the total study population.Subgroup analyses may be conducted to explore variations in prevalence rates by profession, gender, age, and other relevant factors. Additional outcome measures include the impact of MSDs on academic performance and quality of life among college-going health professionals.Datawill be collected on factors such as absenteeism, reduced productivity, interference with daily activities, and overall well-being.

By examining these outcome measures, this study aims to provide a comprehensive understanding of the prevalence, types, risk factors, and impact of musculoskeletal disorders among college-going health professionals. Additionally, the effectiveness of preventive measures and interventions in promoting the physical and mental well-being of this population will be assessed, contributing to the development of evidence-based strategies to address this important public health issue.

RESULT

In this study, 201 subjects were involved, and female booted to 56.57% of them.The mean age was 22.67 (± 1.294), mean height was 161.4 (± 6.619) ,and the meanweightwas56.73(±5.616) amongtheseparticipants.

Themajoritywereabnormallevel ofstressaswellasameanstressscoreof15.79.Table 2demonstratesthe prevalence of musculoskeletal disorders among our participants, a total of 39%presentedwithneckpainduringlast 12monthsalongwith37%reportedwithworkpreventionand23.1%reportedwithpainduringlast7day.

Fig1: level of stress of psychosocial distress

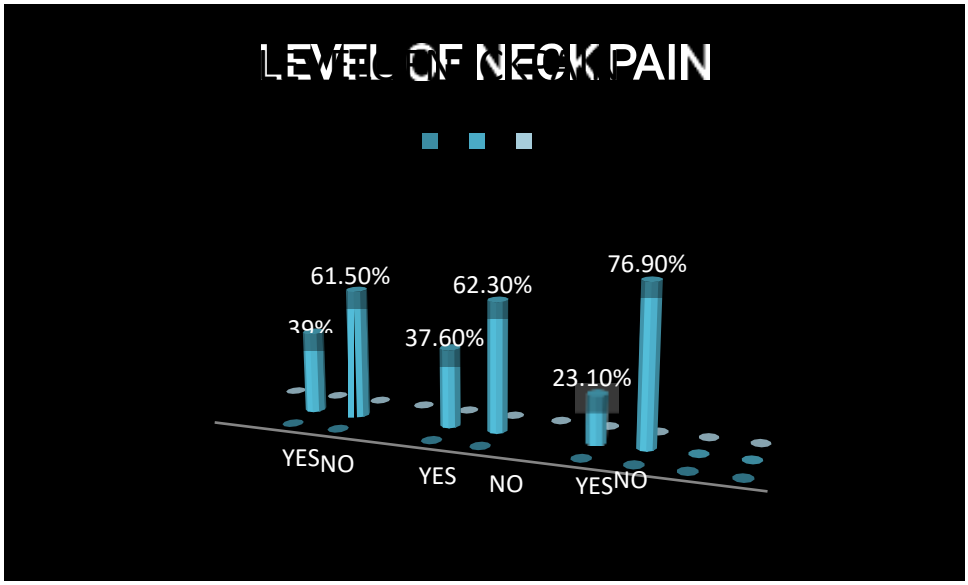


fig 2: level of disability of neck

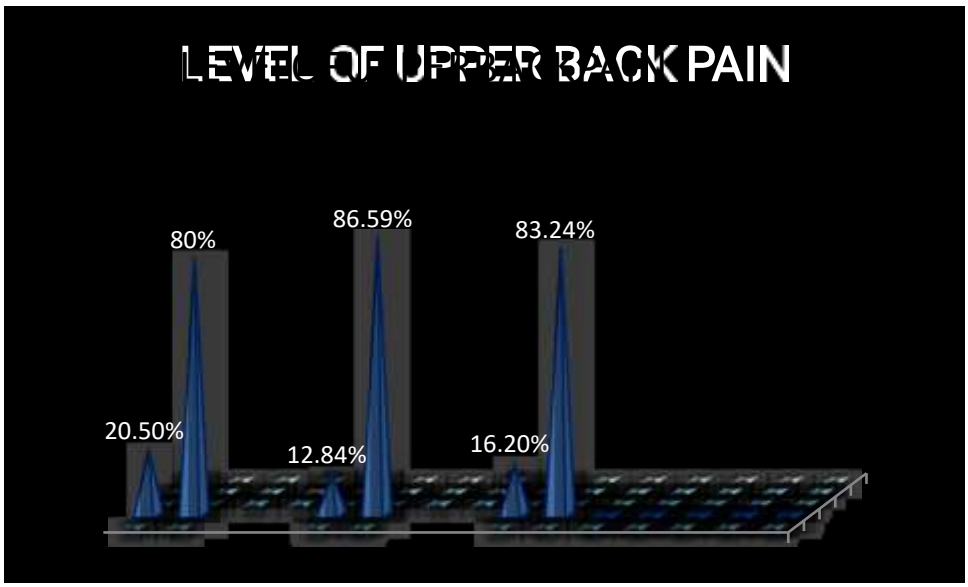
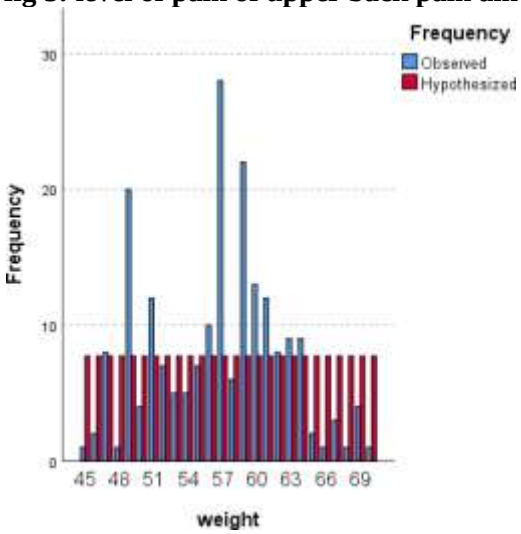


fig 3: level of pain of upper back pain ain



Discussion

Prevalence of Musculoskeletal Disorders (MSDs)The study found a high prevalence of MSDs among college-going health professionals, consistent with previous research. The prevalence rates varied by profession, with certain disciplines experiencing higher rates of specific MSDs. Risk Factors and Contributing Factors Several risk factors were identified, including prolonged sitting or standing, poor ergonomic practices, heavy lifting, psychosocial stressors, and workload demands.[7] These factors contribute to the development and exacerbation of MSDs among college students in healthcare professions Impact on Academic Performance and Quality of Life MSDs were found to have a significant impact on academic performance, with affected students reporting higher levels of absenteeism, reduced productivity, and interference with daily activities.[8] The findings underscore the importance of addressing MSDs to ensure the academic success and overall well-being of college-going health professionals Effectiveness of Preventive Measures The study evaluated the effectiveness of various preventive measures and interventions in mitigating the prevalence and impact of MSDs among college students[9,10]. Ergonomic interventions, stress management programs, and wellness initiatives were found to be beneficial in reducing the risk of MSDs and improving students' overall health and well-being.[11] Implications for Practice and Policy The study has important implications for practice and policy, highlighting the need for comprehensive interventions to address MSDs among college-going health professionals.[12] Educators, healthcare institutions, and policymakers should prioritize the implementation of ergonomic guidelines, stress management programs, and wellness initiatives to support the physical and mental health of students in healthcare professions.[13]

Conclusion

In conclusion, this study sheds light on the prevalence, risk factors, impact, and management of musculoskeletal disorders (MSDs) among college-going health professionals. The findings underscore the significant burden of MSDs on the physical and mental well-being of students in healthcare professions. High prevalence rates of MSDs, coupled with their detrimental effects on academic performance and quality of life, highlight the urgent need for comprehensive interventions to address this important public health issue.

Limitations

Self-Report Bias: The reliance on self-reported data may introduce bias, as participants may underreport or overreport symptoms.Cross-Sectional Design: The cross-sectional design limits the ability to establish causal relationships between risk factors and MSDs.Sampling Bias: The study's sample may not be representative of all college-going health professionals, potentially limiting the generalizability of the findings.

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