

PREVALENCE OF NECK PAIN AMONG THE PHYSICAL THERAPY STUDENTS IN PESHAWAR

Muhammad Nayab Ali¹, Mohammad Ibrahim Khan¹

¹ Rehman College of Rehabilitation Sciences, Peshawar

Address for Correspondence:
Muhammad Nayab Ali
 Rehman College of Rehabilitation Sciences, Peshawar
 Email:shahbms@msn.com

ABSTRACT

Background & purpose:

Physiotherapy institutes extend throughout the field of medical education. Students are exposed to stress, study pressure that play a very important role among the skillful professionals who promote the health care to the society.

Objective: The aim of this study was to form a profile of neck pain and supply an outline of risk factors in regards to physical therapy students in particular.

Subjects & methods: A study was conducted among the students. Questionnaires were distributed among 200 participants of the study, 20 students from each institute. Response rate was 84%. Statistical Package for Social Sciences (SPSS) version 16.0 was used to analyze the data.

Results: The prevalence of Neck Pain (NP) among the physical therapy students of mentioned institutes of Peshawar was 84%. The results showed that the 24% participants including 40% Male and 60% Female belonged to age group of 20 years whereas 28% students reported to have neck pain belonged to 5th (Final) Year

Effects of neck pain on ADL such sleeping disturbances were reported among 23.3% students, Difficulty using laptop in 16.5%, difficulty using computer in 14.5%, driving difficulties in 17% students were reported with overall disability rate being mild (65.5%).

Conclusion: The Prevalence of NP among the Physiotherapy students is found out to be very high with certain risk factors contributing to it. Also females were found to have more NP ratio then the male students. If the causing factors are reduced then the rate of NP will also get affected.

Key words: Neck Pain, Undergraduate, Physiotherapy Students, Musculoskeletal Disorder.

Most researches have mentioned that neck pain prevalence is higher in women than in men⁹.

Other factors are depression and anxiety which indirectly increases pain whereas some studies reported that 70% women have had neck pain as well as anxiety and depression¹⁰.

The major effect of neck pain among the medical undergraduates was experienced during the time of training and studies¹¹. Students experienced neck pain during preparation and attempt of the exams and prolong chair-sitting posture, which were the most common factors of neck pain whereas this type of posture is referred to bad posture¹². They also reported neck pain while reading books in lying position on floor or on the bed for long time¹³.

Another common problem which young medical professional is usage of computers and laptops for 4 to 5 hours¹⁴. About 36% of undergraduates showed neck pain due to use of computer work¹⁵.

The diagnostic team involves medical professional team, physician, neurologist, radiologist, physiotherapist, orthopedist and others. Before any verification of anything the medical professional team excludes all other possible related pathologies¹⁶.

The acute neck pain can be reduced by correct posture, changing position while sitting in chair or lying on bed or floor, changing the working habits and daily regular exercises¹⁷.

The neck pain can be treated by a large number of interventions such as by simply taking analgesics, alteration of the bad posture and active movements. At times this pain goes to severity which shows that some traumatic or infective causes were there which can be

INTRODUCTION

Neck pain is the commonest problem in the population which affects almost 67% of the individuals at a certain point in their life¹. High prevalence rates of neck pain has been reported in population ranging from 17 to 35 years of age.²

Neck pain according to the time spend (Weinstein et al., 1995) can be described briefly as acute pain with duration being less than 3 months but onset will be fast, sub-acute pain onset will be gradual and have less than 3 months and chronic pain duration is will

be longer than 3 months³. The neck pain common area is lower cervical, scapular and shoulder⁴ and is usually associated with tenderness, inflammation and limitations of movements⁵.

Most of the studies about etiology of neck pain are intensively on work-related risk factors both with respect of specific profession for example dentists, physiotherapists, bus drivers, office workers, wards' doctors etc⁶ and specific physical, professional⁷ or psychosocial risk factors have been associated with neck pain⁸.

managed by cervical spine surgeries¹⁸. Acute neck pain can be worst by repetition of the causative factors and it may cause secondary pathology¹⁹.

METHODS

Sampling:

Convenience sampling

Subjects:

One hundred and sixty eight undergraduates (UG) including both males and females of Institute of Physical Medicine and rehabilitation (IPM&R), Mahboob School of Physical Therapy (MSP), National College of Sciences (NCS) and RMI-CS having neck pain were included in the study.

Instrumentation:

Standardized Nordic Questionnaire (SNQ) with some modification due to different cultural and social aspects was used for this purpose.

In this questionnaire there are 3 categories which evaluates the Demographics (age, gender), Risk Factors (Psychological, Work environmental, physical) and Clinical Causes (Pain intensity, timing, etc) ⁵⁷.

The questionnaire used in this study was used in Indian Population by Muchna, Julie Miroslava et al Diss. 2011.

Procedures:

The purpose of the study was discussed with all the participants. Informed consent was send to RMI-CS, IPM&R, MSP and NCS which finally got approved by the head of the departments. The questionnaire was explained to all the students of afore mentioned institutions.

Requirements for inclusion consisted of undergraduate students of physiotherapy without any history of cervical disc herniation, cervical spondylitis, cervical spine fracture and

post-surgical conditions of neck with no other pathology such as low back pain, traumatic case, cervical, lumbar, thoracic region pain.

Questionnaires were filled for screening Participants meeting inclusion and exclusion criteria were included in the study.

All the twenty Questionnaires were filled by the students and all of them were reported to have neck pain.

Data analysis:

The data was analyzed using SPSS version 20. Age, gender, studying year, institutions, working hours and other contents were generated as numerical variable and mean, median, mode were calculated.

Relationship between age and studying year and relationship between gender and working hours was also established. Relationship between age and studying year was established.

Results:

The sample consisted of 200 students in which only 168 (84%) undergraduate students had neck pain between the ages of 24 have 24% where mostly 5th year students having neck pain with (28%) where males was (40%) and females (60%) reported neck pain.

Table I

No/%	Do You have Neck Pain?	What is Your Age?	What is your Gender?	Which Year do you read?	Which Institute do you Study?	How many hours a day do you spend in front of your computer?	Which Posture you using Laptop/Computer and for Reading Studying?	How would you rate your overall disability because of your neck pain?
Total Numbers= 200	168	Age 20%	Male/ Female	5th year	IPM&R/ MSP/ NCS/ RMI-CSR	1-3 Hour	Back Sitting	Mild Disability
Percentage	84%	24%	40%/60%	28%	42%/27%/ 17%/14%	69%	46.5%	65.5%

Out of all four institutes, IPM&R had 42%, MSP had 27%, NCS had 17% and RMI-CRS had only 14% students with a neck pain. Figure 1.

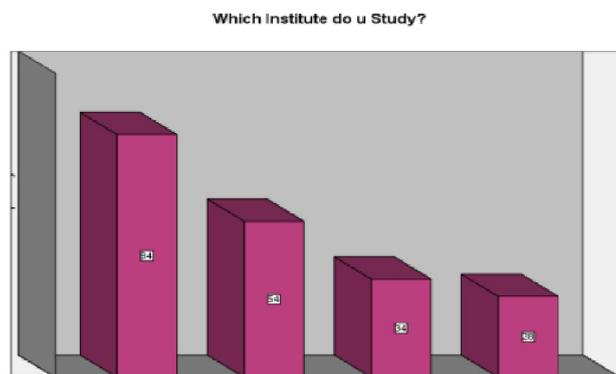


Fig. 1

Most of the students 69% had a neck pain while they spend more than 1 to 3 hours in front of computer. Figure 2.

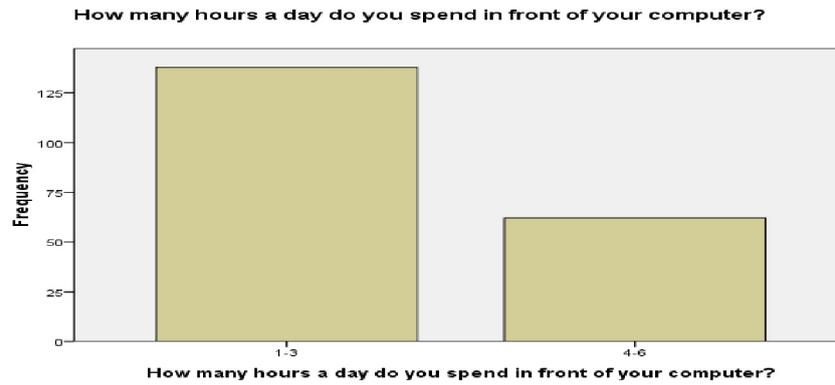


Fig.2

Back sitting was the most adoptive posture 46.5% which is mostly used by students among the physical therapy undergraduate students. Figure 3.

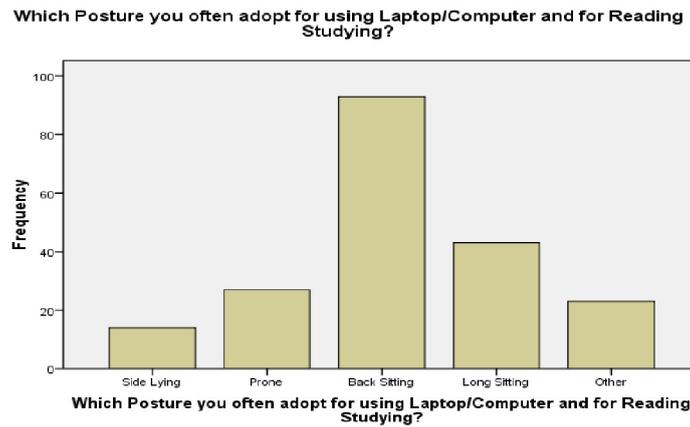


Fig.3

And overall disability which is caused by Neck Pain is Mild 65.5% seen in students, Figure 4

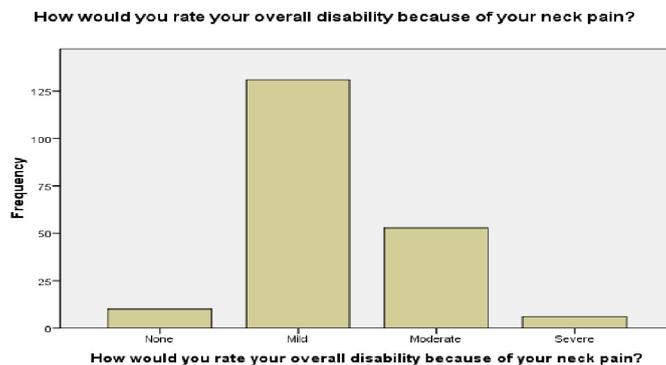


Fig.4

DISCUSSION

In this study, 168 rehab undergraduate physical therapy student of Peshawar reported neck pain and also the risk factors as well as clinical causes which contribute to the discomfort in their student life.

Prevalence of neck pain in population is commonly between the ages of 17 to 35.2. Another survey reported that their mean age was 22.1 years (SD 3.4)58 while this study's result have showed same age frequency of 22.04 between 19 to 25 years and 24% at age of 20 while frequency of those at age 25 years is only 10%

The result showed that 40% male and 60% of females reported NP.

Other demographical presentation is UG PT Students of Peshawar Rehab institutes' highly prevalence is 28%, 23.5%, 26%, 14.5% and 8% from 5th, 4th, 3rd, 2nd and 1st year of education respectively. The result supports of the fact that final year students are complained of NP more than lower other year UG PT's students.

NP was found out among 69% UG PT students with prolong computer usage hours which are 1 to 3.

All of these factors can cause disabilities to in doing ADL, sleeping disturbances 23% whereas, second most is reading and studying 22%, using laptops is 16.5%, computer usage is 14.5% and driving is 17% respectively.

And over all disability due to neck pain was mild to moderate i.e. 65.5 % to 26.5%.

CONCLUSION

Neck pain and its related MSD can have a massive impact on younger population, especially UG PTs students who have to provide health care to the population. Due to this they face difficulties in several activities, like driving car, studying, reading books and operating the computer and laptops. They will have reduced ability to participate in work, social and sporting activities which can easily cause additional increase in MSD related to neck pain.

LIMITATIONS

During the questionnaire filling process it was noted that comparatively male students completed the questionnaires more than the female students. A reason for this possibly the cultural standards. Other thing is the availability of the students from specific marked rehab universities. The other limitation which is noticed is was that the newly open rehab universities limits the most years spend in the same UG degree.

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