

A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURE TEACHING PROGRAMME ON KNOWLEDGE REGARDING TEXT NECK SYNDROME AMONG ADOLESCENTS IN SELECTED COLLEGES OF MEHSANA DISTRICT

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DOI No. – 08.2020-25662434

Abstract

Health is a very important aspect in the life of everyone. Nothing is more important than health and fitness for any human being. Technology has indeed helped us in many ways, but on the downside, it has also lead to the rise of lifestyle disorders. The term “Text neck” was coined by Dr. Dean L. Fishman, a US chiropractor. The term of Text neck or another phrase turtle neck posture can be described as a repeated stress injury and pain sustained from excessive watching or texting on handheld devices for long periods of time. A quantitative approach using pre-experimental one group pre-test post-test design. 60 adolescents were selected using non-probability purposive sampling technique in selected colleges of Mehsana district. Structured teaching programme was given to the adolescents. Self Structured Questionnaire was used to assess the level of Knowledge on Text neck syndrome among adolescents. In this study overall Among the 60 adolescents, the majority of the samples 37(61.66%) were in the age group of 18 years,34(56.66%) of the sample were in the female gender ,52(86.66%) of the samples were in the religion of Hindu, were 60(100%) sample of stream of education, were occupation of father 25(41.66%) have private jobs, were mother occupation 40(66.66%) are the house maker, about socio economic status 43(71.66%) are from the middle class, half proportion of samples 44(73.66%) were in nuclear family, dietary pattern of samples 33(55%) were in vegetarian , most of the samples 60(100%) were have a smartphones, and higher proportion of samples 44(73.33%) have using a mobile 2-4 hr. per day. The findings of the study revealed that structured teaching programme helps in improving knowledge regarding text neck syndrome among adolescents.

Keywords: Assess, Effectiveness, Structured teaching programme, Knowledge, text neck syndrome, adolescents.

INTRODUCTION

“Early to bed and early to rise makes a man healthy, wealthy, and wise.”

- Benjamin Franklin

Health as defined by the world Health Organization “A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”¹

A mobile phone is a wireless handheld device that allows users to make and receive calls. While the earliest generation of mobile phones could only make and receive calls, today’s mobile phones do a lot more, accommodating web browsers, games, cameras, video players and navigational systems. Also, while mobile phones used to be mainly known as “cell phones” or cellular phones, today’s mobile phones are more commonly called “smartphones” because of all of the extra voice and data services that they offer.²

In the digital age, it is a common sight to see people of all ages hunched over their digital devices. Technology has indeed helped us in many ways, but on the downside it has also led to the rise of lifestyle disorders.³

The cervical spine is a continuous and coordinated network of muscles, nerves, and joints, the pathway ranging from the brain to the spinal cord. Irritation along this pathway leads to pain.⁴ The term “Text neck” was coined by Dr. Dean L. Fishman, a US chiropractor. The term of Text neck or another phrase turtle neck posture can be described as a repeated stress injury and pain sustained from excessive watching or texting on handheld devices for long periods of time. In today’s mobile technology has advanced so much, there are more and more people who are spending an increased amount of time on handheld devices, such as smartphone, computer, tablet and e-readers. Text neck leads to harmful symptoms such as neck pain, upper back pain, shoulder pain, chronic headaches and increased curvature of the spine.⁵

During the last few years, a growing reporting of data is showing that the “text neck syndrome” might be considered as an emerging 21st-century syndrome. This clinical condition refers to the onset of cervical spinal degeneration that results from the repeated stress of frequent forward head flexion while we look down at the screens of mobile devices and while we “text” for long periods of time.^{6,7}

Text neck syndrome is more common in adolescents, who, for several hours a day and for several days a year, hunch over smartphones and personal computers more frequently than in the past.⁷ It is estimated that 75% of the world’s population is hunched over their handheld devices hours daily with their heads flexed forward.⁷

The end result is prolonged flexion of the neck when bent over these electronic devices resulting in the „ Text Neck“. This condition is a growing health concern and has the potential to affect millions of people all over the world. People’s contemporary lifestyle has become much dominated by computer technology; often overuse in digital tasks on handheld mobile technology induces Text Neck Syndrome.⁸

NEED OF THE STUDY

Technology has truly become an inseparable part of our lives and an essential tool in every field. But, with increasing number of mobile users, the number health issues are also growing at a rapid pace. If you work in front of a mobile for a few hours that too once in a while you may not be at a health risk. But if you spend about 2 hours or more continuously then you should probably keep a check on these health issues.⁹

The number of smartphone users in india was estimated to reach over 748 million in 2020, with the number of smartphone users worldwide exceed to 1.5billion users in 2040¹⁰

A recent study shows that 79% of the population between the age 18-44 have their phones with them almost all the times. So, the mobile technology has advanced so much, there are more and more people who are spending time with mobile that’s why they are suffering from neck pain and other symptoms because of prolonged flexion of neck.¹¹

Recently on October, 2021 sandesh news, gujarat published health tips and try to spread awareness about this syndrome because most of the people are not aware about this. Orthopedic surgeon Dr.

Shakti Goyal declare that chronic headache, back pain these all are not a normal symptoms but its leading cause of text neck syndrome and children are more prone as compare to old age people. They also adviced to take vitamin D rich diet and normal healthy exercise. 12 On 28th October 2020 The new indian express, Hydrabad published that large hours spent on yours smartphone/ tab can cause serious aliments to your neck which is also known as text neck. India today also shows data about the neck pain problems. Doctors says that during lockdown people are more prone to neck pain problems due to work from home, online studies and overuse of mobile and laptops.13 According to global mobile consumer survey 2017, reported that smartphone penetrartion is highest among ages 18-24 years olds.17 TISS-UNICEF data shows that total about 50% of smartphone users are under age 25.18 By ANI, report published by doctors of capital in business standard on 23rd December 2017 that increasing incidence of text neck syndrome. Studies have reported that an average consumer spends around 3 hrs per day on average on mobile device. In india excessive usage and poor posture while using mobile devices and others tech gadgets causes repetitive stress injury on the neck and spine.14

According to Wikipedia 17,july 2021, 1.75% of the population will experience neck pain sometime in their lives. According to global burden of disease study, Neck pain ranks the 4th as the leading causes of disability worldwide. 2018 ergonomic research and statistics shows data that 21% have knowledge about text neck syndrome.15

According to WHO musculoskeletal disease as the 4th and 10th pathological condition and global burden of disease neck pain is the 8th ranked reason for most years lived with disability for 15-19 years old of any health conditions, which is higher than other well known adolescent health problems.16

On 8th july 2021, NDTV website published about the latest health problem due to tech is called „text neck“ or „forward head syndrome“. It’s the results of bending your head down for long periods of time while using the mobile phone. Also fitness expert Yasmin Karachiwala along with physiotherapist Dr. Hemakshi Basa has attached a series of videos to demonstrating the simple exercise that can be done at home to help cause the strain on your neck.17

Asian journal posted research articles on july- September 2021, the study was conducted in Bishop Moore College, Mavelikara among 60 young adults. The results shows that the mean posttest knowledge score is 20.26 and the pretest knowledge score is 8.43. One another cross sectional questionnaire was used in primary and secondary Thailand schools, from November 2009 to june 2011, recruiting 2750 participants. This school age adolescents reported a high prevalence of neck and shoulder pain , as European adolescents (from 15-28%), and chinese teenagers (41.1%) . The prevalence of musculoskeletal pain symptoms in school age adolescents is different among age, groups and sex. 24

In epidemiology studies evaluating the general population, the 1-year incidence of neck pain can be as high as 40%.23 Among all health conditions for years lived with disability, the World Health Organization (WHO) has classified neck pain and other musculoskeletal diseases as the 4th and the 10th pathological condition, respectively.18 As well, this report showed that these conditions represent the key drivers of the increase in years lived with disability over the past 20 years. Similar data have been reported in childhood. In fact, according to the WHO Global Burden of Disease, neck

pain is the 8th ranked reason for most years lived with disability for 15–19-year olds of any health condition, which is higher than other well-known adolescent health problems, such as asthma, alcohol use, drug use, and road injury.¹⁹ In adults, there are extensive data about the epidemiology, burden and treatment of musculoskeletal pain, but contrasting and not universally accepted results are reported in children and adolescents. In fact, the lack of clinical research in children and adolescents has been emphasized by several studies.^{20,21} Emerging evidence shows that children and adolescents with persistent pain are at an increased risk of chronic pain as adults. Moreover, a lot of musculoskeletal illnesses follow a pattern of long-term recurring exacerbations and remissions and the better predictor of a new episode is the experience of a previous episode.²² As we know that the prevalence of musculoskeletal conditions in childhood and adolescence is always increasing, it may be important to investigate the condition early in life and to understand the main aspects and risk factors of the onset of the symptoms, in the way to provide and to develop the best and the most efficacious treatments.²³

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of structured teaching program on knowledge regarding Text Neck Syndrome among adolescents in selected colleges of mehsana district.

OBJECTIVE OF THE STUDY

- To assess the knowledge regarding text neck syndrome.
- To evaluate the effectiveness of structured teaching program on knowledge regarding text neck syndrome.
- To find out the association between knowledge with their selected demographic variables.

HYPOTHESES

H0 : There will be no significant difference between pre test and post test knowledge score regarding Text Neck Syndrome among adolescents at 0.05 level of significance.

H1 : There will be significant difference between pre test and post test knowledge score regarding Text Neck Syndrome after administration of structured teaching programme among adolescents at 0.05 level of significance.

MATERIAL AND METHOD

Pre-experimental one group pre-test post-test research design and Quantitative Approach. Effectiveness of structured teaching programme on knowledge regarding Text Neck Syndrome among adolescents in selected colleges of Mehsana district. The data was collected from 60 adolescents. “Non-probability purposive” sampling technique were used. A structured knowledge questionnaire was selected to assess the knowledge regarding Text Neck Syndrome. RESULT Demographic data was analyzed using frequency and percentage. Frequencies, percentage, mean, mean percentage (%) and standard deviation was used to determine the knowledge score. The “t” value was computed to show the effectiveness of structured teaching programme and chi-square test was done to determine the association between the pre-test knowledge of office employees with selected demographic variables.

FINDING RELATED TO DEMOGRAPHIC DATA

In this study overall Among the 60 adolescents, the majority of the samples 37(61.66%) were in the

age group of 18 years,34(56.66%) of the sample were in the female gender ,52(86.66%) of the samples were in the religion of Hindu, were 60(100%) sample of stream of education, were occupation of father 25(41.66%) have private jobs, were mother occupation 40(66.66%) are the house maker, ,about socio economic status 43(71.66%) are from the middle class, half proportion of samples 44(73.66%) were in nuclear family, dietary pattern of samples 33(55%) were in vegetarian , most of the samples 60(100%) were have a smartphones, and higher proportion of samples 44(73.33%) have using a mobile 2-4 hr per day.

FINDING RELATED TO PRE AND POST KNOWLEDGE SCORE

Pre-test prior to the administration of structured teaching programme, 26.66% of adolescents had poor knowledge (score: 0 - 7) and 73.33% office adolescents had average knowledge (score 8 – 15) regarding text neck syndrome among adolescents.

Post-test that was marked improvement in the knowledge of adolescents with majority (60%) of adolscents gained good knowledge (score 16-23) and (40%) gained average knowledge (score 8-15) regarding text neck syndrome among adolescents.

It was inferred from the below table that the structured teaching programme was effectiveness in improving knowledge on text neck syndrome among adolescents.
Finding related to effectiveness of structured teaching programme

Table 1: Distribution of subject on paired‘t’ test between pre-test and post-test knowledge score regarding computer vision syndrome.

PARAMETER	MEAN	SD	MEAN %	‘t’ VALUE
Pre-test	8.95	2.92	44.75%	9.94
Post-test	14.53	3.22	72.65%	

Finding related to association between pre-test knowledge score of office employees with their selected demographic variables:

To find out the pre-test knowledge score with selected demographic variables were found by using chi-square test. The results of the present study showed that there is no any significant association found between pre-test knowledge score and selected demographic variables like Age, gender, religion, stream of education, occupation of mother, occupation of father, socioeconomic status, type of family, dietary of pattern, Do you have smartphone, duration of using mobile per day and evaluate the knowledge regarding Text Neck Syndrome. So, the research fulfills study objective.

CONCLUSION

The present study aims to evaluate the effectiveness of structured teaching programme on Knowledge regarding text neck syndrome among the adolescents at selected colleges. The study conducted by using a pre-experimental one group pretest-posttest Research Design. selected area is there in study for sample collection at Mehsana.The sample size was 60 college students. The tool used for the study is self structured knowledge questionnaire. The response was reanalyzed through descriptive (mean, frequency, percentage distribution, standard deviation) and inferential statistics (t test, Chi square). The findings was completed on the objective of the study.

REFERENCE

- 1) <https://www.pfizer.com/health-wellness/wellness/what-is-wellness>
- 2) <https://www.techopedia.com/definition/2955/mobile-phone>
- 3) <https://www.newindianexpress.com/lifestyle/health/2020/aug/23/heres-how-needle-therapy-can-help-treat-your-text-neck-2186203.amp>
- 4) Neupane S, Ali UI, Mathew A. Text neck syndrome- systemic review. Imperical J interdisciplinary Res. 2017;3 (7):141-8.
- 5) Vate , Lan P. , Text neck epidemic : a growing problem for smart phone users in Thailand . Int J Comput Internet Manag . 2015 ; 23 (3) : 1-55
- 6) Fares, J.; Fares, M.Y.; Fares, Y. Musculoskeletal neck pain in children and adolescents: Risk factors and complications. Surg. Neurol. Int. 2017, 87, 2.
- 7) KK aggraeal, text neck syndrome, indian journal of clinical practice, vol. 31 No. 1, june 2013.
- 8) Andersen, JH; harhoff, M; grimstrup, S; vilstrup I; C F ; iassen, C F; et al. “ mobile use predict acute pain but not prolonged or chronic pain on the neck and shoulder” occupational and environment medicine. (2008) 126-31
- 9) Sharma AK, Khara s, Khandekar J mobile related health problems among information technology professionals in delhi, Indian j Community Med 2006.
- 10) <https://www.statista.com/statistics/467163/forecast-of-smartphone-users-in-india>
- 11) Poonsri Vate - U - the Internet and Management, Lan International Journal of the Computer, Vol.23 No.3 (September December , 2015) pp . 27-3
- 12) Bharat@dbc Corp.in
- 13) <https://www.newindianexpress.com/cities/hyderabad/2020/oct/28?what-you-need-to-know-about-texttech-necl-pain-of-textingage-2215813.amp>
- 14) <https://wap.bussiness-standard.com/article/news-ani/doctors-in-capital-report-increasing-incidence-of-text-neck-syndrome>
- 15) <https://pubmed.ncbi.nlm.nih.gov/>
- 16) www.WHO.int
- 17) www.ndtv.com/health/correct-your-posture-get-rid-of-text-neck-these-and-easy-exercises-will-help-2482371
- 18) Vos , T .; Barber , R.M .; Bell , B .; Bertozzi - Villa , A .; Biryukov , S .; Bollinger , I .; Charlson , F ; Davis , A .; Degenhardt , L .; Dicker D .; et al . Global , regional and national incidence , prevalence and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries , 1990-2013 s
- 19) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7914771/>
- 20) Cohen , E .; Uleryk , E .; Jasuja , M. An absence of pediatric randomized controlled trials in general medical journals , 1985-2004 . J. Clin . Epidemiol . 2007 , 60 , 118- 123.
- 21) Rodgers , A. Managing chronic pain in children and adolescents . BMJ 2002 , 324 , 1570-1576
- 22) Taylor , J.B .; Goode , A.P .; George , S.Z. Incidence and risk factors for first - time incident low back pain : A systematic review and meta - analysis . Spine J. 2014 , 14 , 2299-2319
- 23) Kamper , S.J .; Henschke , N .; Hestbaek , L .; Dunn , K.M .; Williams , C. Musculoskeletal pain in children and adolescents . Braz J. Phys . Ther . 2016 , 202 , 75- 84 .
- 24) Annu Pinto, Mrs. Rekha. S, Mrs. Evangelin. J, effectiveness of Structured teaching programme on knowledge regarding Text Neck Syndrome, Asian journal of nursing education and research, vol-11,issue-3, 2021



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