Effectiveness of Tech Neck Exercise among adult smartphone user with Text Neck Syndrome

Resmy V*, Priyanka R

Department of Obstetrics & Gynaecological Nursing, Saveetha College of Nursing, SIMATS, Thandalam, Chennai, Tamil Nadu, India

ABSCT

A mobile phone is a gadget which is utilized for voice and information correspondence. Alongside the fundamental voice limit of a phone, current mobiles may support various additional features, for instance, text advising, email, gaming, camera, Whatsapp, Facebook, GPS and so on. The neck or cervical spine is a system which involves nerves, bones, joints, and muscles which are coordinated by the brain and the spinal cord. Besides, exacerbation along the nerve pathways can cause torment into the shoulder, arm and hand. “Text neck” is the term used to depict the neck torment and harm bolstered from looking down at the cell phone, tablets or distinctive far off gadgets too constantly and for actually quite a while. So the current examination points are to survey the effectiveness of tech neck exercise among adult smartphone user with text neck syndrome. Quantitative experimental research was conducted among 60 adults. A convenient sampling technique was used to select the samples. Self-structured questionnaires were used to collect the demographic data and pain scale was assessed. The result of the study shows that among 60 samples, it was concluded that “TECHNECK” exercise has no side effects and it is an easy and comfortable method which can be practised for a long time to adult within text neck syndrome.

INTRODUCTION

A mobile phone is a gadget which is utilized for voice and information correspondence. Alongside the fundamental voice limit of a phone, current mobiles may support various additional features, for instance, text advising, email, gaming, camera, Whatsapp, Facebook, GPS and so on. (AlAbdulwahab et al., 2017)

The neck or cervical spine is a system which involves nerves, bones, joints, and muscles which are coordinated by the brain and the spinal cord. Besides, exacerbation along the nerve pathways can cause torment into the shoulder, arm and hand. “Text neck” is the term used to depict the neck torment and harm bolstered from looking down at the cell phone, tablets or distinctive far off gadgets too constantly and for actually quite a while. (Chany et al., 2007) Neck torment is the vibe of burden in the neck. Neck torment can result from issues of any of the structures in the neck, including the cervical vertebrae and intervertebral discs, nerves, muscles, veins, throat, larynx, windpipe, thyroid organ, or parathyroid glands. (Ching et al., 2015) Neck torment rises up out of different conditions and is now and then alluded to as cervical pain.
Exposure from the receiving antennas is consistent (extremely low) lights the entire body and uncovered the whole network. Accordingly, the Exposure to low-level radiation for the long haul will prompt some natural hazards. (Jagadeeswari, 2019)

The term Text neck was instituted by Dr L Fishman, who is a US chiropractor. (Erdinç et al., 2011) The term text neck is used to depict a dull weight injury or a maltreatment issue where an individual has his/her head hung or flexed in a forward position and is twisted down taking a gender at his/her versatile or other electronic gadgets for delayed time frames. In this today's world, where the mobile innovation has progressed such a great amount, there is an ever-increasing number of individuals who are investing an expanded measure of energy in handheld gadgets, for example, advanced mobile phone, PC, tablets and tablets. The final product is drawn out due to the bend of the neck as an effect of electronic gadget leads to 'Text Neck'.

This situation is a developing wellbeing burden and can possibly influence a large number of individuals everywhere throughout the world. (Gustafsson et al., 2017; Hakala et al., 2006; Kim and Kim, 2015) People's contemporary way of life has gotten a lot of commanded by PC innovation; regularly abuse in advanced errands on handheld portable innovation initiates 'Text Neck' or another expression turtle neck act, can be depicted as a rehashed pressure injury and torment continued from inordinate review or informing on handheld devices for broad time spans.

Tech neck may cause various hazardous signs, for instance, neck torture, shoulder torment, upper back torture, steady headaches and extended curve of the spine. Phone users often forget to keep the neck in pose so long time bending while looking down at the screens of mobile devices leads to this condition. (Koh, 2000; Lau et al., 2010; Ming et al., 2006)

Text neck influence directly the spine while flexing the head forward at different degrees when the head inclines forward at 15°, the powers on the neck fold to 27 £, at 30° 40 £, at 45° 49 £and at 60 ° 60 £, that at 90° the model expectation was not solid. This concern is a significant worry with kids, since their heads are bigger corresponding to their weight than grown-ups, and along these lines, they have an expanded take a huge risk can be the outcome and be very like word related abuse disorder or rehashed stress/strain injury. (Neupane et al., 2017; Shah and Sheth, 2018; Sengupta et al., 2007)

The purpose of study 1. To assess the pretest level and post-test level of text neck syndrome among smartphone user adult in both experimental and control group. 2. To determine the effectiveness of text neck exercise among smartphone user adult in the experimental group. 3. To find the association between the level of text neck exercise within their selected demographic variables.

MATERIALS AND METHODS

A quantitative research approach with Quasi-experimental pretest-posttest only controls group design was used to conduct a study in Saveetha College of Nursing, SIMATS, Thandalam. Sixty adolescents were selected by using a Non-probability purposive sampling technique. The inclusion criteria for samples were Adolescents aged between 11-20 years and above who were smartphone users and who were available and willing to participate in the time of study and who can understand Tamil and English. The exclusion criteria for the samples are adolescent who is using a normal cell phone. The data collection period was done with prior permission from the HOD of Saveetha College of Nursing, SIMATS, Thandalam and ethical clearance was obtained from the institution.

The purpose of the study was explained to the samples and accent was obtained from them. The demographic data and structured questionnaire were collected using a structured interview questionnaire method. After collecting the data, the samples are instructed to do the neck exercise for one week, and the doubts will be clarified instantly and post-test was assessed. Chi-square was used to the association of Text Neck Syndrome with selected demographic variables.

RESULTS AND DISCUSSION

Sample characteristics

Among 60 samples, most of the adult smartphone users 22(36.7%) were in the age group of 20 – 35 years, 33(55%) were male, 18(30%) had higher secondary education, 25(41.7%) were doing other types of occupation, 43(71.7%) were Hindus, 54(90%) belonged to a nuclear family, 19(31.7%) had a BMI of 22 – 24 and 25 – 29 respectively, 44(73.3%) used to spend >3 hours for mobile phone usage in a day, 46(76.7%) were using a smartphone and 24(40%) had a monthly income of Rs.20,000-30,000.

Assessment of level of Tech Neck Exercise among adult smartphone users.

The pretest, 32(53.3%) had mild pain, 26(43.3%) had moderate pain and 2(3.3%) had severe pain.
Table 1: Frequency and percentage distribution of level of text neck syndrome among adult smartphone users N = 60

| Text Neck Syndrome | No Pain |  |  |  |  |  |  |  |  |  |  |
|--------------------|---------|---|---|---|---|---|---|---|---|---|---|
|                    | No      | % | No | % | No | % | No | % | No | % | No |
| Pretest (M = 10.48) | 0       | 0 | 32 | 53.3 | 26 | 43.3 | 2 | 3.3 | 0 | 0 | 0 |
| Post Test (M = 4.22) | 0       | 0 | 60 | 100.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Whereas in the post-test, after the administration of Tech Neck Exercise, almost all 30(100%) had mild pain. Table 1

Effectiveness of Tech Neck Exercise on text neck syndrome among adult smartphone users

The pretest means a score of text neck syndrome among adult smartphone users was 10.48 with standard deviation 3.78 and the post-test mean score was 4.22 with standard deviation 2.52. The calculated paired ‘t’ test value of t=11.711 was found to be statistically highly significant at p<0.001 level. This clearly infers that Tech Neck Exercise administered to adult smartphone users resulted in the significant reduction in the post-test level of pain among adult smartphone users. Table 2

Association of Text Neck Syndrome with selected demographic variables

The demographic variables age of the adult smartphone users had indicated a statistically significant relationship with post-test mean scores of text neck condition at p<0.05 level and the other segment factors had not demonstrated measurably huge relationship with post-test mean scores of text neck syndrome among adult smartphone users.

The present study was supported by Renu (2018), led an examination on a survey the viability of structured teaching plan on text neck syndrome among adolescent of Sree Narayana Gurukulam higher secondary school, chempazhanthy, sreekaryam, Thiruvananthapuram. The researcher used Quantitative research approach using one group pre-test post-test method. The present study was carried out on 60 samples. The variables used in this study were age, sex, monthly income, place of residence and type of family. The result shows, statistical relation between age, sex, type of family and monthly income. The mean pretest score 9.08+_2.38and mean posttest score17+_2.83. (Renu, 2018)

CONCLUSIONS

This study proves that “TECH NECK” exercise is the effective non-pharmacological method and cost-effective method to treat smartphone user adult within text neck syndrome. The selected adults became more familiar and comfortable to “TECH NECK” exercise. From the consequence of the investigation, it was presumed that ”TECH NECK” exercise has no side effects and it is an easy and comfortable method which can be practised for a long time to adult within text neck syndrome.

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Conflict of Interest

The authors declare that they have no conflict of interest.

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