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Original Research Article

**EVALUATION OF KNOWLEDGE, ATTITUDE PERCEPTION
TOWARDS TEXT NECK SYNDROME AMONG POPULATION: A
CROSS SECTIONAL STUDY**

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ABSTRACT

Text neck is a syndrome which is described by repetitive stress injury and pain in neck. It is a health condition which develops by using a mobile phones or watching any handheld devices for a prolonged period of time. It is commonly found in children. The risk factors of developing text neck is abnormally stretching a muscle and tendons of your neck which puts a pressure on nerves in your back. It is a symptomatic and may cause severe symptoms including spine arthritis, spinal misalignment, spinal degeneration, disc compression, loss of lung capacity, muscle weakness, etc. An overview on account systemic reviews on text neck syndrome a survey is conducted. About 101 persons participated by attending our questionnaire. This study is done in between January 2020 to March 2020. The data was collected randomly. The value of entire knowledge and attitude is found to be significantly statistical. It has been concluded that most of the people have insufficient knowledge regarding this topic even in an educated group and also in those who are victims of this. Awareness programs and counselling should be conducted to help people to stay safe from TNS.

Key words: TNS, awareness, questionnaire, knowledge, counseling

Authors' Contributions: 1 Conception, study design, data collection & processing, critical review. 2 & 4 Conception & study design, data collection & processing. 3-4 Data analysis and/or interpretation. 3 Drafting of manuscript. 4 Drafting of manuscript, critical review.

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INTRODUCTION

Dr. Dean L Fishman, a US Chiropractor emerged the term “text neck”. He described the repetitive stress injury and pain in neck which is resulting from a bit much watching a device or texting on hand held device over a persistent period of time. Text neck syndrome is also known as “Turtle neck posture” or “Anterior head syndrome”. [1]Text neck is a health condition which is incessantly growing in mobile users in all over the world. As compare to adults, childrens are more prone to text neck syndrome because their heads are larger in relation to their body size than adults.

Text neck syndrome leads to harmful symptoms such as neck pain, upper back pain, shoulder pain, chronic headache, increased in curvature of spine. Basically, this syndrome transpire by increasing the concern especially with children giving their greater propensity to using mobile phone. [2]Recent researches showing that around 87% of teenagers(14-18years) in USA and 79% teenagers(12-15 years) in UK uses smart phones. Among adult aged(18-34 years) 92% and 95% reported in using smart phones in USA and Australia, respectively.

The researched done in Thailand shows that Text Neck syndromhas become a global epidemic which is affecting number of populations of approximately of all ages who are using mobile phones. [1-3]. By kinking the head forward to use mobile phone immediately affects the spine. Untreated Text Neck causing damage of spine. The Text Neck commonly represent by neck pain, stiffness, and soreness in neck. If is not treated than it leads to permanent arthritic changes of neck ligaments, muscles, and nerves.[4-6]. Text Neck syndrome is potentially leading to early spine arthritis and upto 30% decrease in lung capacity and various musculoskeletal problems. It may also leads to some serious damage, like spinal misalignment, spinal degeneration, disc compression, disc herniation, etc.Few epidemiological studies reported a high prevalence of neck shoulder pain syndrome.[7-9] A study in Canada indicated the rates of 46-52% in shoulder symptoms and among them 140 individuals and 68% in neck symptoms.Among these, some more symptoms which may also develop are:

- Flattening of thoracic kyphosis.
- Early onset arthritis.
- Spinal degeneration.
- Muscle weakness.
- Loss of lung capacity.

Text neck syndrome symptom can also be observed by the patient feel like it's stabbing or stinging on one spot.sharp pain is fell in lower level of neck.Difficulty in moving and soreness in neck when try to move head after the long use of smartphones.Pain can radiate along a nerve from the neck into the shoulder and arms due to excessive forward head posture.Shoulder muscles and especially trapezius, scalenus, are the main reason for weakness.Tension headache, such as from neck muscles tightening an irritation in the neck can also affect muscles and nerve to the head. [10]The Text Neck epidemic is a global problem. To decrease the stress on spine the posture must be correct while using the smartphones, computers, or other hand held devices. The following recommendations should must be kept in mind to get prevention from text neck are:

- Holding large or heavy devices in one hand for sustained period of time must be avoided.
- Don't use the device excessively and take frequent breaks.
- Avoid the repetitive movements such as, prolong typing and swiping. [11]

Different type of stretches can be done hold neck for 10-30 seconds. Such as side neck stretch, levator scapula stretch, front neck stretch etc. Most neck strains and sprains, going easy for a few days is all that is needed while the muscles and tendons heal on their own. Avoid strenuous activities or movements that are causing more pain. Chin and scapula retraction can be done It helps to strengthen the muscles of neck and head stabilizing muscles and get rid of postural instability and neck pain. Many pain medications are available, and each has its own potential risks and benefits. While opioids have commonly been prescribed for pain relief fewer opioid prescriptions for chronic pain management due to the risk for addiction and other possible complications. Ice can be used to reduce swelling inflammation and pain . It's better to apply ice or cold packs for neck pain because they can temporarily close small blood vessels and prevent swelling from becoming worse. Heat can be applied on an alternating basis after couple of days.[3,5,12]

METHADODOLOGY

The perspective of this study is to evaluate the awareness and knowledge among population areas. About 101 persons participated by attending our questionnaire and this study is done in between January 2020 to March 2020. During this time the collection of data were selected randomly. The questionnaire was assembled in 5 fragments. First one is sociodemographic data of the participants. The next portion comprises of the knowledge about text neck syndrome in which we discover the awareness about it. In other section we inaugurate the attitude towards the syndrome, which is comprises of statements so that we can easily find out their point of view. Then our most important fraction in which we asked from our participants to achieve their reviews that how they deal with this if they are having those symptoms. Last portion contains information about the barriers that are faced by participants to prevent them from text neck syndrome. All details and informations provided by the participants will remain confidential.

RESULT

Table 1 shows that demographic characteristic in which age group mostly participated group 20-30, 64.60%. In gender participants female are 66.70% while male are 33.30% in ratio. The educational background in are research pattern in which undergraduate is 51.05%, postgraduates are 16.02%, intermediate category comprises of 23.02% while the school students included 9.10%. It also shows that 74.07% are unemployed while employed person are 25.03%. among the participant 66.07% are unmarried and 33.03% participant are married

There is a remarkable lack of knowledge about this disease ; from the data it is observed that the participants who don't know about the condition even in some people they are facing this condition but still they don't know about this and the ratio of these participants is 59.06% and rest of the people who participated are somewhat aware of the condition ant the ratio of these participant is 35.04%. As it is showed in table 2 the ratio of symptoms like postural fatigue, tightness sharp pain in neck and shoulders 74.07% participant and in rest of the 25.03% people symptoms didnot appear. According to the table mostly participant thinks that text neck syndrome is present in adults i.e 85.09%. About 38.04% people thinks that it is present in children while 61.06% population thinks that it does not present in children. This table also shows 79.02% participant think that text neck syndrome is caused due to frequent usage of mobiles and 41.04% think that it is a life threatening condition the higher percentage obtain for the people thought it is cause due to bending your neck and shoulder while studying i.e 90.09% and 9.10% % people don't think soo. It also showsthat the participants who thinks that text neck syndrome is curable is in greater

ratio i.e 84.02 % ratio of participants as shown in the table who thinks that text neck syndrome is the new silent health epidemic is 68.04%.

The 2nd table of our research article evaluates attitude of the participants towards text neck syndrome which reflects their opinion on the factual statements given to them in the definition that is 55.01% and those which have strongly agreed with this statement are 32.07% and only 3.01% participant disagree to this statement. The following statement is about text neck syndrome arises due to wrong body posture 52% agree while 4.01% disagree. The participant which agree that text neck typically begins as a relatively mild ache in the neck or upper back is 54.01% while only 3.01% disagree. 1% people agree that it is more common in childrens while 33.07% response neutrally. Another statement in which the 47.04% participant agrees that adult while studying faces sharp pain in their neck and back and 5.02% participant disagree with this statement.

Another statement in which 46.09% agrees that health awareness should be conducted for text neck syndrome and only few participant disagree. Another highest percentage that questionnaire into simple ratio of agreement and disagreement. The first statement which simply defines the syndrome and on which higher percentage of participant who are agreed with this is 35.01% participant agrees include the statement that less usage of mobile and laptop can reduce the risk of text neck syndrome and the participant whom disagree for the statement is 2.01%. the one of the statement in which people agrees that text neck syndrome leads to disc displacement in your body is 47.09%. The statement which get higher ratio 57.01% in which people agrees force on the neck, increase the more we tilt our head leads to spine curvature and the participant whom disagree for the statement is negligible. 7 in 8 spend at least 3 hour a day on their phone 6 of the get neck aches at least once a month in which 53.01% agrees with the statement. In another statement in which opinion is taken that is text neck syndrome text neck syndrome arises due to any other reason in which 41.08% agrees with the statement and 36.07% shows neutral response

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Table 1. Sochiodemographic Data of Participants

#	Characteristic	Percentage
1	Age group	
	5-10	1%
	10-20	16.20%
	20-30	64.60%
	31-40	9.10%
	40-50	7.10%
	50 above	2%
2	Gender	
	Male	33.30%
	Female	66.70%
3	Education	
	School	9.10%
	intermediate	23.02%
	Undergraduate	51.05%
	Postgraduate	16.02%
4	Marital status	
	Married	33.03%
	unmarried	66.07%
5	Employment	
	Employed	25.03%

In another statement in which opinion is taken that is text neck syndrome text neck syndrome arises due to any other reason in which 41.08% agrees with the statement and 36.07% shows neutral response the following sequence the next section we seek information from the participant regarding there personal experiences on practical basis. Firstly we hit up the participant that weather they have developed soreness in shoulder in neck and shoulder, stiff neck, headache, numbness in arm or sleep problem (96%) for that we obtain maximum ratio of the participant and only (4%) people who never experienced this. The next question of this section is that whether they have taken the symptoms on a serious note and consult or ignore it and in this we obtain maxim The last section of our questionnaire is based on barriers or hindrance towards the barriers and prevention taken by participants in which data obtained is illustrated as follow; lack of knowledge(42.01%), lack of awareness (43.02%), more usage of smart phones and tablets (62.01%), wrong body posture (64.02%), others (6.03%).

TABLE 2. Knowledge About Text Neck Syndrome

Questions	YES	NO
Q1. Have you ever heard about text neck syndrome?	41.04%	59.06%
Q2 Do you know text neck syndrome?	35.04%	64.06%
Q3. Have you ever experience symptoms like postural fatigue, tightdness sharp pain in neck and shoulders ?	74.07%	25.03%
Q4. Have you ever saw a person suffering from this symptom?	56.06%	43.04%
Q5. Do you think it is most probably present in childrens?	38.04%	61.06%
Q6. Do you think it is present in adults ?	85.09%	14.01%
Q7. Do you think text neck syndrome is caused due to frequent usage of mobiles?	79.08%	20.02%
Q8. Do you think it is a life threatning condition?	41.04%	58.06%
Q9. Have you ever thought it is cause due to bending your neck and shoulder while studying?	90.09%	9.10%
Q10. Do you think text neck syndrome is curable or not?	84.02%	15.08%
Q11. Text next syndrome is the newsilent health epidemic?	68.04%	31.06%

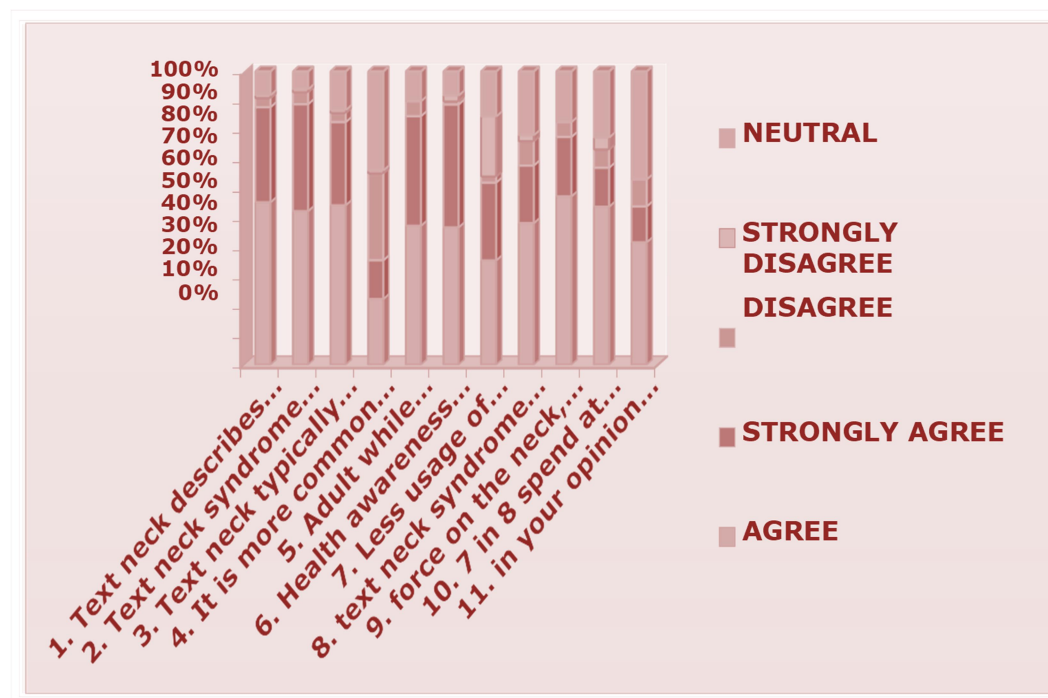


Figure 1: Graphically representation of responses

DISCUSSION

This study is organized to assess the knowledge and awareness among the population about text neck syndrome. This article is about text neck syndrome which is due to excessive use of mobile phones with the head bent downward for prolonged period causes stress over neck leads to neck and shoulder pain, neck injury and soreness . another reason of TNS is wrong body posture while using mobile phones which also leads to damage of spinal cord. The rate of appropriate knowledge about this syndrome is about 59.6% which shows lack of awareness among people and about 35.4% are having information about this new silent epidemic which is very terrified condition. In our research we accommodate the result which shows about 85.09% people think that it is present in adults and 38.04% in children which is giving us signals that how much our youngsters are addicted to smart phones that are leading them towards serious symptoms and 74.07% people are facing these symptoms and about 47% people even feel that sharp pain while studying too because of repetitive stress towards neck.

52% people were agreed that it is due to wrong body posture and 53.01% people get neckache due to excessive mobile use. On the other hand in our study we asked our population about their personal experiences regarding TNS symptoms. So about 96% people are having numbness in arm, stiff neck and headache and only 7% took their symptoms serious and consult doctor which means 93% of them ignored their symptoms and shows lack of interest towards their well-being which is terror stricken point because TNS leads to major serious risk factors such as disc displacement, early onset arthritis and flattening of thoracic kyphosis. To avoid precautionary measurements such as less usage of electronic device, proper sleep, consultation from doctor, taking any pain killer to reduce pain, performing stretching exercise, changing posture during prolong usage should be done. At last to seek less awareness of text neck syndrome in spite of being so common that cause hindrance in its prevention we got to know 42.01% lack of knowledge, 43.02% lack of awareness, 62.01% more usage of smart phones and tablets, 64.02% wrong body posture, are the major barriers towards prevention of text neck syndrome.

CONCLUSION

This research study regarding text neck syndrome which is a new silent epidemic in this era. This study has demonstrated that it is very usual in adults than children due to excessive use of mobile phones which arises the symptoms of TNS. About 64.06% peoples are unaware about this syndrome which is blood curdling condition and if people are having those symptoms so it is seen in our research that there is no management is done to treat or prevent this syndrome which is a very frightening condition. There should be awareness program to help our population to stay safe from TNS as it is repetitive stress injury and can easily relieved and prevented by less usage of mobile phones.

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