



Evaluation of Knowledge about Neck Pain among Ortho OPD Patients in Civil Hospital Rohru, District Shimla

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Author Details

Dr. Hari Mohan Sharma¹, Dr. Jalaj Jhalta^{*1}
 and Dr. Ravinder Kumar²

Authors Affiliations

¹Medical Officer (Orthopedics), Civil Hospital, Rohru, District Shimla, India
²Medical Superintendent, Civil Hospital, Rohru, District Shimla, India

Corresponding Author*

DR. JALAJ JHALTA

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Abstract: Background: Neck pain occurs commonly throughout the world and causes substantial disability and has a large impact on individuals and their families, communities, healthcare systems. This study was undertaken with the objective to assess the knowledge about risk and preventive factors for neck pain among Ortho OPD patients in civil hospital Rohru. **Material & Methods:** This cross sectional study was conducted between Aug- December 2020 among Ortho OPD patients in civil hospital Rohru selected by convenience Sampling Technique. Information regarding their socio-demographic characteristics and knowledge, regarding prevention of neck pain were obtained using a self-administered, pre-tested, semi-structured questionnaire. Data was analyzed using Epi info v7 software using appropriate statistical tests. **Results:** In the present study 35% (140) of the Patients fall were below 40 years of age while 65% (260) were above 40 years. 54% (216) of patients were male and 46% (184) were female. Among the total patients maximum 305(76.25%) respondents told that Bad posture while working on computer/mobile/reading is the major risk factor for neck pain followed by Hard pillow during sleep 285(71.25%) and Bad posture while sitting, walking & during sleep 203(50.75%). Among the total , maximum 312(78%) respondents told that the Frequent position change and stretching the neck muscles while working is the major preventive factor for neck pain followed by Maintaining good posture while sitting, walking and sleeping 306 (76.5%), and using a soft pillow during sleeping 298(74.5%). **Conclusion:** Frequent position change and stretching the neck muscles while working , Maintaining good posture while sitting, walking and sleeping and Frequent breaks while working on computer/mobile helps in preventing neck pain.

Keywords: Neck pain, cross sectional study ,knowledge , risk & preventive factors.

INTRODUCTION

Neck Pain is defined by the Global Burden of health 2010 Study as "pain in the neck with or without pain referred into one or both upper limbs that lasts for at least one day". Neck pain occurs commonly throughout the world

and causes substantial disability and economic cost. The pain and disability associated with neck pain have a large impact on individuals and their families, communities, healthcare systems and businesses. Approximately half of all individuals will experience a clinically important neck pain episode over the course of their lifetime (<https://www.physio-pedia.com;> & <https://www.centerwatch.com>).

Neck pain is also referred to as cervical pain. Risk factors for neck pain share similarities with other musculoskeletal conditions such as genetics, psychopathology (eg, depression, anxiety, poor coping skills, somatisation), sleep disorders, smoking, and sedentary lifestyle. Unique risk factors for neck pain include a history of neck pain, trauma (eg, traumatic brain and whiplash injuries) and certain sports injuries (eg, wrestling, ice hockey, football). Although certain occupations such as office and computer workers, manual labourers, and health care workers, have been found in some studies to have a higher incidence of neck pain, the major workplace factors associated with the condition are low job satisfaction and perceived poor workplace environment (<https://www.physio-pedia.com;> & <https://www.physio-pedia.com>)

Neck pain is a symptom commonly associated with dull aching. Sometimes pain in the neck is worsened with movement of the neck or turning the head. Other symptoms associated with some forms of neck pain include numbness, tingling, tenderness, sharp shooting pain, range-of-motion difficulties, fullness, difficulty swallowing, pulsations, swishing sounds in the head, dizziness or lightheadedness, and lymph node (gland) swelling (<https://www.medicinenet.com;> & <https://www.spine-health.com>).

Most neck pain improves gradually with home treatment. Contacting a doctor is necessary when neck pain is severe, Persists for several days without relief, Spreads down arms or legs or is accompanied by headache, numbness, weakness or tingling (<https://www.healthline.com;> & <https://www.mayoclinic.org>).

A number of studies conducted in different parts of India reveal widespread ignorance and misconceptions about the neck pain among people. As this disease largely relies on prevention and the right information at the right time is essential to bring about a behavioral change when the population is most receptive. Hence, this study was undertaken with the objective to assess the knowledge about risk and preventive factors for neck pain among ortho OPD patients in civil hospital Rohru.

Objectives of the Study

- To evaluate the knowledge of patients attending Ortho OPD towards risk and Prevention of neck pain in civil hospital Rohru.

RESEARCH METHODOLOGY

- Research Approach -Descriptive
- Research Design-Descriptive survey design
- Setting of the study- Ortho OPD of civil hospital Rohru
- Study duration- between Aug- December 2020
- Study population- Ortho OPD patients in civil hospital Rohru.
- Sample size-400 Ortho OPD patients
- Sampling Technique- convenience Sampling Technique
- Sampling criteria- first five patients attending the Ortho OPD of civil hospital Rohru everyday were selected till the completion of sample size after explaining the purpose of the study. Informed consent/assent was taken

from them and confidentiality of the selected participants was also maintained

- Inclusive Criteria- Patients selected during the day of data collection in study setting and who were willing to participate in the study.
- Exclusion Criteria: Patients who were not willing to participate in the study
- Development of Tool-Knowledge related questionnaires
- Description of Tool
Section A-Socio-demographic characteristics of the patients (Age, Gender etc.).
Sections B- Questions regarding knowledge of risk & preventive factors for neck pain
 Validity of tool - by the experts in this field
- Permission- obtained from the concerned head of the civil hospital
- Data collection by myself and patients was given 5 minutes time to complete that questionnaire and collected at the end of the prescribed time
- Data analysis with appropriate statistical test in terms of frequencies & percentage.

RESULTS

The present study was Non-experimental descriptive study carried out to evaluate knowledge of risk and preventive factors for neck pain in civil hospital Rohru.

In the present study 35% (140) of the Patients fall were below 40 years of age while 65% (260) were above 40 years. 54% (216) of patients were male and 46% (184) were female.

Table-1: Knowledge about risk factors of Neck Pain

S.No.	Risk factors	Frequency	Percent
1.	Over use of computer or smartphone	201	50.25
2.	Bad posture while working on computer/mobile/reading	305	76.25
3.	Bad posture while sitting, walking & during sleep	203	50.75
4.	Driving or traveling long distances	79	19.75
5.	Nerve compression	21	5.25
6.	Neck Muscle weakness	19	4.75
7.	Lack of physical activity/exercise	107	26.75
8.	Overweight/ Obesity	72	18
9.	Neck muscle strain /injury/stress	26	6.5
10.	Carrying heavy bags on Head/shoulder	189	47.25
11.	Inadequate amounts of dietary calcium & vitamin D intake	80	20
12.	Hard pillow during sleep	285	71.25
13.	Unhealthy diet	34	8.5
14.	Don't know	35	8.75

Among the total study participants, 35 (8.75%) did't know about any risk factor of neck pain. 305(76.25%) respondents told that Bad posture while working on computer/mobile/reading is the major risk factor for neck pain followed by Hard pillow during sleep 285(71.25%), Bad posture while sitting, walking & during sleep 203(50.75%), Over use of computer or smart phone 201 (50.25%), Carrying

heavy bags on Head/shoulder 189 (47.25%), Lack of physical activity/exercise 107(26.75%), Inadequate amounts of dietary calcium & vitamin D intake 80 (20%), Driving or traveling long distances 79(19.75%), Overweight/ Obesity 72(18%), Unhealthy diet 34(8.5%), Neck muscle strain /injury/stress 26(6.5%), Nerve compression 21(5.25%) and Neck Muscle weakness 19(4.75%).

Table-2: knowledge of patients towards Prevention of Neck Pain

S.No.	Preventive Factors	Frequency	Percent
1.	Use a headset or speakerphone rather than cradling the phone on shoulder when talking on the phone	204	51
2.	Maintaining good posture while sitting, walking and sleeping	306	76.5
3.	Sit straight in chair with neck and back support while studying/reading properly	219	54.75
4.	Adjust the desk, chair and computer while studying/reading	221	55.25
5.	Frequent breaks while travelling long distances	82	20.5
6.	Frequent breaks while working on computer/mobile	213	53.25
7.	Frequent position change and stretching the neck muscles while working	312	78
8.	Avoid neck injury/sprain	32	8
9.	Avoid heavy lifting on head/shoulder	210	52.5
10.	Exercise of neck & yoga regularly	113	28.25
11.	Eat healthily and balanced diet	36	9
12.	Maintain ideal weight	75	18.75
13.	Use a soft pillow during sleeping.	298	74.5
14.	Calcium and Vitamin D supplements	83	20.75
15.	Don't know	31	7.75

Among the total , maximum 312(78%)respondents told that the Frequent position change and stretching the neck muscles while working is the major preventive factor for neck pain followed by Maintaining good posture while sitting, walking and sleeping 306 (76.5%), Using a soft pillow during sleeping 298(74.5%), Adjusting the desk, chair and computer while studying/reading 221 (55.25%), Sittiing straight in chair with neck and back support while studying/reading properly 219(54.75%), Frequent breaks while working on computer/mobile 213 (53.25%), Avoid heavy lifting on head/shoulder 210 (52.5%), Using a headset or speakerphone rather than cradling the phone on shoulder when talking on the phone 204(51%),Exercise of neck & yoga regularly 113 (28.25%), Calcium and Vitamin D supplements 83(20.75%), Frequent breaks while travelling long distances 82(20.5%),Maintaining ideal weight 75(18.75%),Eat healthily and balanced diet 36 (9%) and Avoiding neck injury/sprain32(8%). Still 31(7.75%) respondents didn't know any preventive factor for shoulder pain among participants.

DISCUSSION

Neck pain is a common complaint that can be caused by a variety of different health conditions. It can range from mild to severe, with more severe cases possibly indicating a serious underlying problem.Mild to moderate neck pain can usually be treated at home and improves within a couple of weeks (<https://www.healthline.com>; & <https://www.everydayhealth.com>).

Acute neck pain may be treated with heat or ice applied at home, over-the-counter or prescription pain relievers, massage therapy, chiropractic manipulation and stretching. but it's important to seek immediate medical attention if someone develop severe neck pain suddenly due to an injury, such as after a car accident or a fall. One should also consult a healthcare provider if, in addition to neck pain, he or she also experiencing numbness or loss of strength in arms or hands, or a shooting pain down your arm.Chronic neck pain may be treated with some of the remedies listed above. However, in some cases, surgery is required to address the specific conditions causing pain in the neck (<https://www.medicalnewstoday.com>;<https://www.spine-health.com> (1); & <https://www.spineuniverse.com> (2)).

In the current study, maximum 312(78%)respondents told that the Frequent position change and stretching the neck

muscles while working is the major preventive factor for neck pain followed by Maintaining good posture while sitting, walking and sleeping 306 (76.5%), Using a soft pillow during sleeping 298(74.5%), Adjusting the desk, chair and computer while studying/reading 221 (55.25%),Sittiing straight in chair with neck and back support while studying/reading properly 219(54.75%), Frequent breaks while working on computer/mobile 213 (53.25%), Avoid heavy lifting on head/shoulder 210 (52.5%), Using a headset or speakerphone rather than cradling the phone on shoulder when talking on the phone 204(51%),Exercise of neck & yoga regularly 113 (28.25%), Calcium and Vitamin D supplements

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Sitting and standing up straight with shoulders back helps keep the spine in neutral alignment. Remembering to use good posture throughout the day helps minimize the forces acting on the intervertebral discs and ligaments.Not all neck pain can be prevented, but maintaining good posture by keeping the shoulders straight over hips and ears right above your shoulders but certainly it can help reduce the chances of developing neck pain. If someone work at a desk, adjusting setup so that computer monitor is at eye level and knees are slightly lower than hips when sitting helps in preventing neck pain (<https://www.healthline.com> (1); & <https://www.spine-health.com> (3))

Sleeping with head and neck in alignment with the rest of the body also helps in preventing neck pain.The Mayo Clinic recommends to sleep on the back with thighs elevated on pillows in order to flatten the spinal muscles. Finding the right pillow, mattress, and sleep position can reduce the risk for waking up with neck pain. However, everyone is different, and it could take trial-and-error before settling on what works best. For example, sleeping on the stomach causes the most stress on the cervical spine, but not everyone agrees as to whether sleeping on the side or on the back is better. Also, some people prefer a cervical pillow, but others may find more comfort with other pillows (<https://www.spine-health.com> (4); & <https://www.healthline.com> (2)).

A physically active lifestyle keeps the whole body relatively strong and flexible, including the neck. In addition, regularly performing exercises and stretches that target the neck and core muscles can help improve posture as well. Many neck strains result from poor posture due to deconditioned neck muscles. When starting a new activity or sport, begin at a manageable pace or workload, then gradually build up over time. It is common to strain a muscle when performing a new or unfamiliar activity (<https://www.spine-health.com> (5); & <https://www.physio-pedia.com>).

Having a strained neck increases the risk for it to happen again in the future. Also, trying to return too quickly from a neck strain injury before it heals can worsen the injury and prolong the recovery period. Repetitive motions can lead to muscle strain, including in the neck. Taking breaks or alternating activities enables muscles to rest and recover to avoid injury. If someone travel long distances or work long hours at your computer, get up, move around and stretching neck and shoulders helps in preventing neck pain (<https://www.spine-health.com> (5)).

Avoiding tucking the phone between your ear and shoulder when someone talking on mobile or phone. Using a headset or speakerphone instead helps in preventing neck pain. The weight can strain your neck. Avoiding carrying heavy bags with straps over shoulder also helps in preventing neck pain (<https://nexxbar.com>).

CONCLUSION

Frequent position change and stretching the neck muscles while working, Maintaining good posture while sitting, walking and sleeping Using a soft pillow during sleeping, Adjusting the desk, chair and computer while studying/reading Sitting straight in chair with neck and back support while studying/reading properly, Frequent breaks while working on computer/mobile, Avoid heavy lifting on head/shoulder, Using a headset or speakerphone rather than cradling the phone on shoulder when talking on the phone, Exercise of neck & yoga regularly, Calcium and Vitamin D supplements, Frequent breaks while travelling long distances, Maintaining ideal weight 75(18.75%), Eat healthily and balanced diet and Avoiding neck injury/sprain helps in preventing neck pain.

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