# The Effect of Change People Lifestyle in Saudi Community during COVID-19 Quarantine on Increasing Number of Chronic Neck Pain Cases

# Omar Ali Saleh Alqarni<sup>1</sup>\*, MajedAbdulrahman Alghamdi<sup>2</sup>, Amr Ahmad Fallatah<sup>3</sup>, Omar Ali Al-Amodi<sup>4</sup> and Anwar Abdulgayed Ebid<sup>5</sup>

<sup>1</sup>Departmentof Physical Medicine and Rehabilitation, Dr Soliman Fakeeh Hospital, Jeddah, Saudi Arabia; <sup>2</sup>Departmentof Physical Therapy, Comprehensive Rehabilitation Center, Jeddah, Saudi Arabia; <sup>3</sup>Departmentof Physical Therapy, East Jeddah Hospital, Jeddah, Saudi Arabia; <sup>4</sup>Department of Physical Therapy, Umm Al-Qura University, Makkah, Saudi Arabia; <sup>5</sup>Departmentof Physical Therapy, Collage of Applied Medical Sciences, Umm Al-Qura University, Makkah, Saudi Arabia

Corresponding author: Alqarni O, Department of Physical Medicine and Rehabilitation, DrSolimanFakeeh Hospital, Jeddah, Saudi Arabia, E-mail:qarni.uqu@hotmail.com

## Abstract

Background: The Chronic Neck Pain is the process of degeneration of the cervical spine and the vertebral bodies. It affects the vertebral bodies and intervertebral disks of the neck and finally leads to herniation of the disks as well as osteophytes and ligament hypertrophy. Purpose: The cross-sectional analytical study focused on the effect of people Lifestyle during COVID-19 quarantine on number of cases of Musculoskeletal Disorders (MSD) especially Non-Specific Chronic Neck Pain in Jeddah (Saudi Arabia), and compare number of cases before and after the quarantine with taking into account the difference in age and gender. COVID-19 period was characterized by lockdown and quarantine. Methods: data collected from one hospital in Jeddah according the patients diagnosed by Non-Specific Chronic Neck Pain in between (1 August 2019 to 30 September 2020) male and female, age 28-40, exclusion criteria: patient with history of fracture in cervical spine, cervical tumors, neck trauma, patient with age more than 40 and less than 28. Collecting the data of 7 months before the quarantine and 7 months during the quarantine. Results: After collecting and counting data, we noticed that there was a doubling in the number of cases and neck problems, and an increase in the number of cases during quarantine by (58.6%), while in females by (46.25%) in general. It increased by 53.3% of cases. Conclusion: The results clearly showed that the effect of people's lifestyle during the quarantine of the emerging corona virus, COVID-19, on the number of cases of Musculoskeletal Disorders (MSD), especially chronic non-specific neck pain in Jeddah (Saudi Arabia), and its impact on males more than females.

**Keywords:** People lifestyle; COVID-19; Quarantine; Cervical spondylosis

# Introduction

The chronic neck pain is a type of neck pain prolonged for more than 3 months without any neurological or traumatic damage. In consistent with the classification of chronic neck pain includes cervicalgia (M54.2), cervical spondylosis without myelopathy, radiculopathy (M47.8), Myalgia, and other (M79.18). According to the international classification of diseases (10.1) CNP consists of the typical musculoskeletal disorders with the prevalence from 26% -71% among the adult community. <sup>[1,2]</sup>

The pandemic covid-19 has triggered the government authority globally to carried out severe strong restrictions includes maintaining social distancing, necessary quarantines, and school shutdown in order to control the outbreak of the viruses. <sup>[3]</sup> Furthermore to mitigate the overload on health care management and scheme seemed too deviated with regards to high levels of care with covid-19 affiliation. Even though the healthcare facility has been a major role in challenge against the viruses, especially the medical professional who deals the patients with feeble cases like physical therapy. <sup>[4]</sup> During the time of covid-19 there was an increased and significant use of telemedicine among medical professionals from different locations and it leads to a new provenance of medical practices especially in physical therapy as Tele rehabilitation to assist and improve the accessibility of care as well as to provide a proper care as per patient's needs. <sup>[4-7]</sup>

The quarantine has used as an oldest tool for controlling the spread and outbreak of communicable during fourteenth century. In Italy, during the time of pandemic plague once a ship arrived at Venice port the passenger should be in quarantine for 40 days. According to them 40 days will be enough to complete the incubation period, so if the person became symptomatic within in the time period can be identified easily. During the time of SARS epidemic the quarantine technique was successfully implemented in 2003 and it became the component of pandemic influenza plan. The quarantine can be defined as the restriction of a person movement who were ventured to exposed or suspected to contagious disease but not ill because of suspiciousness they should be in incubation period even though don't have any symptoms. The quarantine can be applied to individual as well as groups, home isolation always included in

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group quarantining. During the time of quarantine all members monitored carefully for the incidents of clinical features. If the manifestations persist will be isolated instantly and treated start as soon as possible were as asymptomatic people can be return to normal life.<sup>[8]</sup>

#### Statement of the problem

Does the number of Non-Specific Chronic Neck Pain cases increase with COVID-19 quarantine?

#### Significance of the study

We noticed increasing in number of Non-Specific Chronic Neck Pain during COVID-19 quarantine with bad habit.

## Purpose of the study

To know if COVID 19 quarantine effect on increasing number of Non-Specific Chronic Neck Pain, then we will recommend the authors to find solutions to avoid effect of any future quarantine.

#### **Methods**

A retrospective data analysis, data collected from one hospital in Jeddah according the patients diagnosed by Non-Specific Chronic Neck Pain in between (1 August 2019 to 30 September 2020) male and female, age 28 years- 40 years, exclusion criteria: Patient with history of fracture in cervical spine, cervical tumors, neck trauma, patient with age more than 40 and less than 28. Collecting the data of 7 months before the quarantine and 7 months during the quarantine.

## **Subject**

This study introduces the extent of the effect of quarantine

on increasing the rate of neck pain cases, as this study will be done by counting the number of neck pain cases registered at Dr. SolimanFakeeh Hospital during the 7 months before the start of quarantine and during the 7 months after the first day of quarantine.

## **Data Analysis**

The data was collected from Dr. SolimanFakeeh Hospital through an information technology system according to the final patient's diagnosis as nonspecific chronic neck pain by gender and age, and then separates the parts (7 months before quarantine for COVID-19 and 7 months during quarantine for COVID-19).

## **Results**

After collecting and counting data, we noticed that there was an increasing in the number of cases and neck problems, a total of 375 adults (215 males and 160 females) during The COVID-19 quarantine (Mar 2020 TO Sep 2020), and a total of 175 adults (89 males and 86 females) before The COVID-19 quarantine (Aug 2019 to Feb 2020) and an increase in the number of male cases during quarantine by 58.60% while in females by 46.25% in general, It increased by 53.33% of cases. The incidence of neck pain was clearly higher in men [Table 1, Figure 1].

## **Discussion**

The core part of the current study findings includes the CNP 's point prevalence remarkably increased during and after the lockdown from 31.81% to 68.18% [Figure 1].

According to this study results, it revealed that the commonest

| Table 1: The effect of change people lifestyle in Saudi community during COVID-19 quarantine on increasing number of non-specific chronic neck pain cases. |        |        |        |
|--|--------|--------|--------|
| Duration   | Male   | Female | Total  |
| During the COVID-19 quarantine (March 2020-September 2020)   | 215    | 160    | 375    |
| Before the COVID-19 quarantine (August 2019-Febraury 2020)   | 89     | 86     | 175    |
| Percentage change (%)  | 58.60% | 46.25% | 53.33% |



Figure 1: The effect of change people lifestyle in Saudi community during COVID-19 quarantine on increasing number of non- specific chronic neck pain cases.

and most possible musculoskeletal pain area always start from low back and succeed by the neck area. It is the most exciting study related to musculoskeletal disorders conducted in Saudi Arabia.<sup>[9-12]</sup>

Covid-19 is causing an intercontinental pandemic with increased number of deaths and infections cases. For the purpose of managing the outbreak of the covid-19 virus, the governments have imposed some special restrictions on outdoor activities as well as mass quarantines on the community. The Quarantine has few long-term impacts on physical pain, which are mainly related to unhealthy lifestyle and anxiety, in this study, they changed their lifestyle and some of them transferred their work to work remotely from their homes due to the quarantine imposed on the whole community, which led to the practice of wrong habits such as unhealthy sitting for a long time in front of the TV, mobile or laptop screen, in addition to the lack of physical activity. However the limitations of the study incorporate the generalization was not included in this study due to facing a difficulty process in collecting data from a multiple hospital in Jeddah.

## Conclusion

The covid-19 pandemic guide to a striking expands in neck pain potency among the adults residing in Jeddah. Furthermore, neck pain score prevalence expand from 31.81%-68.18%. Being aged between 28 years and 40 years old and the patients, who underwent stress, non-adherence to functional design recommendations as well as prolonged sitting also led to high neck pain intensity.

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