

Editorial

Risk Management of COVID-19 Infection in Physiotherapy: Recommendations

Paria Dehesh*

Department of Epidemiology, School of Public Health, Iran University of Medical Sciences, Tehran, Iran

*Correspondence should be addressed to Dehesh P, Department of Epidemiology, School of Public Health, Iran University of Medical Sciences, Tehran, Iran; E-mail: paria_dehesh@yahoo.com

Received: 21 May 2020 • Accepted: 29 May 2020

Copyright: © 2020 Dehesh P. This is an open access paper distributed under the Creative Commons Attribution License. Journal of Biology and Today's World is published by Lexis Publisher.

DESCRIPTION

Coronavirus disease 2019 (COVID-19) has spread quickly around the world, and WHO categorized it as a pandemic in March, 2020 [1]. In Iran on February 19th, 2020, two patients with positive test result were detected in Qom city. Then, the disease spread very rapidly among all the 31 provinces of the country. At the time of article submission, the total number of infected people whose test result was positive for SARS-CoV-2 was 114,533, with 6,854 patient's death and about 90,539 recovered cases [2]. In this situation, the entire healthcare system and healthcare staff need to respond in a very short time to an exponential growth of the number of COVID-19 patients. So, patients with chronic diseases such as musculoskeletal disorder and low back pain may have trouble treating themselves. The prevalence of chronic neck pain, chronic low back pain, and chronic knee pain among Iranian people was about 15.34%, 27.18%, and 29.97% respectively [3]. Also, one of the major problems of occupational health in industrial countries and especially in developing countries such as Iran is work-related musculoskeletal disorders [4]. Many of the patients with musculoskeletal disorders or back pain need conservative treatments such as Physiotherapy. They may need regular physiotherapy sessions to treat and relieve pain.

The SARS-CoV-2 virus is transmitted from person to person by large droplets from infected person by coughing, sneezing or rhinorrhea. An approximate distance of 2 meters is needed to protect you from these droplets. SARS-CoV-2 similar to the other corona virus family remains on the surface of objects for variable periods of time (at least 24 hours on hard surfaces and up to 8 hours on soft surfaces). Healthy people can be infected with this virus through touching the mouth, nose, or eyes with a contaminated hand. Infected droplets which were created during a sneeze or cough persist in the air for about 3 hours [5]. If healthy people breathe these tiny droplets from the air, they will get the disease. Therefore, a person who goes for physiotherapy may become infected by inhaling polluted air or touching the contaminated surfaces by hand. On the other hand, a physiotherapist may be at risk for contacting infected patients. It is also important to note that some infected people have no symptoms and they are not aware of having the disease. Near 80% of cases are

asymptomatic or mild, 15% had severe symptoms and 5% have critical conditions requiring ventilation and may lose their lives [6]. Till now, there is no effective antiviral drug for the treatment of patients; hence, vaccine for this disease may be produced in future [7]. So having guidelines to protect people who go for physiotherapy is very important.

Recommendations and personal protective equipments for physiotherapists and people who want to have physiotherapy

All of the people must be donning with PPE, including N95 or surgical mask in the best way. If impossible, one of the healthcare staff who has had comprehensive PPE education may check the fitness of masks and teach other patients how to use the N95 in the correct way.

Physiotherapists with beards should remove beards to confirm proper mask fitness.

PPE should be keeping in a suitable place during the time that the person may be at risk of being contaminated PPE (particularly masks) should not be moved during treatment.

In addition, Physiotherapists should wear hair cover, head shield for protection from aerosol-generating procedures [8].

Also; they must wear an additional plastic apron if patients have symptoms similar to that of COVID_19. If reusable PPE items are used (such as goggles), they should be cleaned and disinfected before being used again [9].

Use a paper towel for each patient separately. The physiotherapist should change his or her gloves after each examination.

If every piece of equipment is contaminated with the patients' discharge, it is necessary to clean the plant according to the instructions or by referring to the manufacturer's instructions using the appropriate disinfectant.

Stethoscopes use should be kept to a minimum. If required, be sure to disinfect them with 70% alcohol after being used.

During techniques that may provoke a cough, physiotherapists must teach the patients to cover their cough by coughing into their elbow or using tissue. Tissues must then be thrown away and the hands be washed. The position

of physiotherapists should be more than 2 m away from the patient [10].

Stress may cause negative effects on patients with musculoskeletal disorders or back pain. The SARS-CoV-2-infected patients' stress should be reduced with firm guidelines during physiotherapy. On the other hand, a person may cough during physiotherapy exercises, and physiotherapists, like other healthcare staff are prone to be infected with the patient's discharge. Therefore, it is necessary to pay attention to setting a special protocol.

REFERENCES

1. Huang C, Wang Y, Li X. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The lancet*. 2020; 395(10223):497-506.
2. Worldmeters. Corona virus cases in Iran. 2020.
3. Noormohammadpour P, Mansournia MA, Koohpayehzadeh J. Prevalence of chronic neck pain, low back pain, and knee pain and their related factors in community-dwelling adults in Iran. *The Clin J Pain*. 2017; 33(2):181-187.
4. Zare S, Hasheminezhad N, Dehesh T, Hasanvand D, Ahmadi S, Hemmatjo R. The relationship between mental workload and prevalence of musculoskeletal disorders among welders of Tehran heavy metal structures company in 2016. *J Biol Today' s World*. 2016; 5(12):218-213.
5. Van Doremalen N, Bushmaker T, Morris DH. Aerosol and surface stability of SARS-CoV-2 as compared with SARS-CoV-1. *New England J Med*. 2020; 382(16):1564-1567.
6. Organization WH. Coronavirus disease 2019 (COVID-19): Situation Report, 72. 2020.
7. Adhikari SP, Meng S, Wu YJ. Epidemiology, causes, clinical manifestation and diagnosis, prevention and control of coronavirus disease (COVID-19) during the early outbreak period: A scoping review. *Infectious Diseases of Poverty*. 2020; 9(1):1-12.
8. Alhazzani W, Møller MH, Arabi YM. Surviving Sepsis Campaign: guidelines on the management of critically ill adults with Coronavirus Disease 2019 (COVID-19). *Intensive care medicine*. 2020; 1-34.
9. Control CfD, Prevention. Interim infection prevention and control recommendations for patients with suspected or confirmed coronavirus disease 2019 (COVID-19) in healthcare settings. COVID-19. 2020.
10. Thomas P, Baldwin C, Bissett B. Physiotherapy management for COVID-19 in the acute hospital setting: Clinical practice recommendations. *J Physiotherapy*. 2020.