

Original Research Article

DOI: <https://dx.doi.org/10.18203/issn.2454-5929.ijohns20212443>

Lockdown 1.0 mishaps in Bangalore: an observational study on head and neck injuries

Smitha S. G., Suhasini Hanumaiah, Arunima Sheeja*

Department of Otorhinolaryngology, KIMS Hospital, Bengaluru, Karnataka, India

Received: 07 April 2021

Revised: 19 May 2021

Accepted: 20 May 2021

***Correspondence:**

Dr. Arunima Sheeja,

E-mail: drarunima2793@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: The government of India imposed a nationwide lockdown from 24 March to 14 April 2020, to contain the highly contagious corona virus. The aim of the study was to reflect upon the psychosocial impact of lockdown 1.0 on the population in terms of assaults, self-inflicted injuries and road traffic accidents during the 21 days of lockdown.

Methods: This was a prospective observational study done in KIMS hospital and research centre during nation-wide lockdown 1.0 i.e. from 24 March to 14 April 2020. Patients who visited emergency medicine department with history of assault, self-inflicted injuries, road traffic accidents sustaining injuries to ear, nose, neck and other regions of the face were included in the study.

Results: A total of 32 patients who sustained injuries in the head and neck region during the 21-day lockdown period and came to our institution were included. Out of the 32 injuries, 6 injuries were to the ear, 12 to nose, 5 to the neck region and 9 to other facial regions. There were 18 assault cases causing head and neck injuries, 3 were self-inflicted wounds and rest were injuries due to road traffic accidents.

Conclusions: Several problems emerged following the forced quarantine to combat COVID-19. These inexorable circumstances which are beyond normal experience, lead to stress, anxiety and a feeling of helplessness in all. There is a need to ameliorate people's access to mental health support services geared towards providing measures for developing healthy coping mechanisms during such crisis.

Keywords: COVID-19, Injuries, Lockdown, Psychosocial impact

INTRODUCTION

Coronavirus disease 2019 was first reported in Wuhan province of China and in no time reached India and the pandemic outbreak spread rampantly creating lot of fear and apprehension among the people. Taking a cue from other major economies, the government of India imposed a nationwide lockdown from 24 March to 14 April 2020, to contain the highly contagious virus. Being one of the firsts, where the entire country came to a standstill, the lockdown 1.0 had detrimental effects on physical and mental health of the people of the country.

Lockdown is confinement of population to a restricted area usually imposed as part of an emergency protocol.¹

Lockdowns have existed throughout human history in different forms and for different reasons, either to stop a pandemic or to fight against terrorism or technological disasters. Total lockdown along with other frequently used terminologies like quarantine and isolation, are recognized public health measures that have been used for a long time to protect people. Pandemics have always been an unpredictable event in history given the complexity of the interaction of viruses and human. In 412 BC, Greek physician Hippocrates reported an epidemic caused by influenza virus.² Subsequently, there were two major plague pandemics. The plague of Justinian and black death was followed by socio political and economic decline. In order to protect people from exposure to deadly virus, the practise of confinement of those stricken by plague was

adopted by European maritime powers like England and France.³

Lockdown, confinement and isolation are words which are used positively in battle against the coronavirus around the world these days. Every coin has two sides, so did the lockdown. While some enjoyed quality family time which was otherwise missed during daily busy life, some were stuck with abusive partners, parents or kids and hence caused several incidences of assault, self-inflicted injuries.³ The lockdown causing restricted vehicular movements should have ideally resulted in fewer incidences of road traffic accidents. Despite all the strict measures taken, there were frequent cases of road traffic accidents due to reckless unsupervised driving /riding around the city without seatbelts, helmets, excessive speeding and in wrong direction citing frivolous reasons.⁴

The aim of the study was to reflect upon the psychosocial impact of lockdown 1.0 on the population in terms of assaults, self-inflicted injuries and road traffic accidents during the 21 days of lockdown.

METHODS

This was a prospective observational study done in KIMS hospital and research centre during nation-wide lockdown 1.0 i.e. from 24 March to 14 April 2020. Patients who visited emergency medicine department with history of assault, self-inflicted injuries, road traffic accidents sustaining injuries to ear, nose, neck and other regions of the face were included in the study. Random sampling technique was used.

Patients with injuries to the other parts of the body other than these were excluded. Following a thorough head to toe examination and stabilisation, head and neck injuries were evaluated and categorised based on the site, type and mode of injury. Each injury was managed according to standard hospital protocols and were sent home. Psychological counselling was given to all the patients (Figure 1-4).



Figure 1: Injuries to the neck.



Figure 2: Injuries to the ear.



Figure 3: Injuries to the nose.



Figure 4: Injuries to the other regions over face.

The data collected were segregated and organized. We concluded the results by calculating simple mean and percentages.

Ethical clearance was obtained from the ethical clearance committee of the institution.

RESULTS

A total of 32 patients who sustained injuries in the head and neck region during the 21-day lockdown period and came to our institution were included. 27 were male patients, 14 were female patients (Figure 5). Majority belonged to the age group 20-30 years (Figure 6).

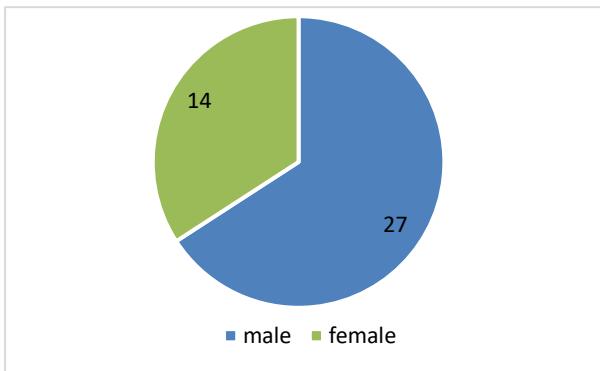


Figure 5: Gender distribution of the patients who were attended.

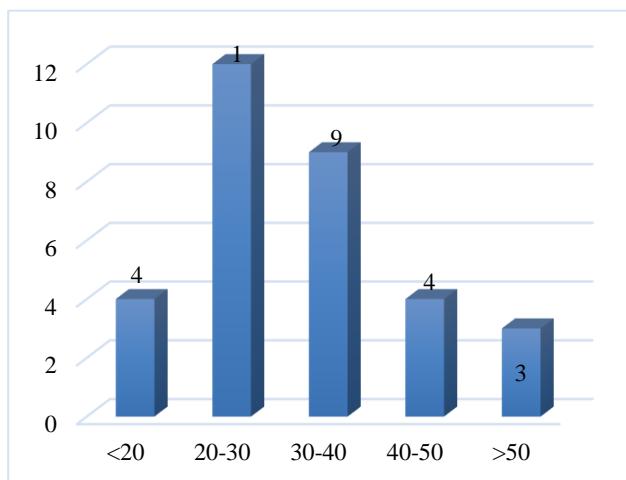


Figure 6: Age distribution of the patients.

Out of the 32 injuries, 3 were self-inflicted injuries and all of them were cut throat injuries. There were 18 assault cases causing head and neck injuries. The assaults were inflicted either by family members, business rivals or unknown people using sharp or blunt objects. We also witnessed 11 injuries due to road traffic accidents (Figure 7).

Based on site of injuries, there were 6 injuries to the ear, out of which 3 were due to road traffic accidents, 5 were assault injuries. The injuries included cut lacerated wound of pinna, avulsion of pinna and wound extending from concha to the external auditory canal. 12 of them sustained injury to the nasal areas. The injuries ranged from extensive cut lacerated wounds destroying the entire osseocartilaginous vault to minor abrasions of the skin. The injuries to neck were 5 in number, 3 were self-inflicted

and 2 were assaults. Maximum number of injuries we encountered were to the nose which was 12 in number. Out of the 12, 3 were result of RTA and 9 were assault injuries inflicted by spouse, relatives or business rivals. The remaining 9 injuries were over other regions of face (Figure 8).

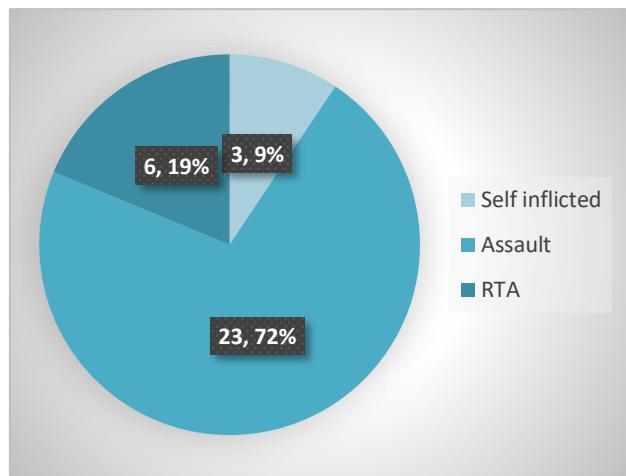


Figure 7: Distribution based on mode of injury.

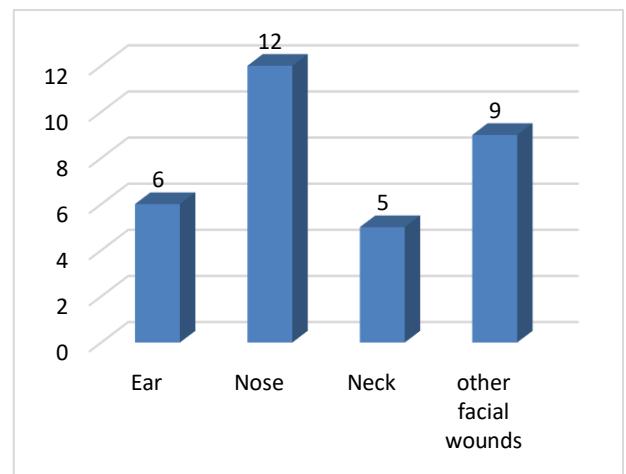


Figure 8: Distribution based on site of injury.

DISCUSSION

The spread of the novel Coronavirus had created a myriad of problems for the people to grapple with. On 24th March 2020, the Government of India under Prime Minister Narendra Modi announced a nationwide lockdown for 21 days. 1.3 billion residents of the nation were forced to be confined to their homes as a preventive measure to curb the COVID-19 pandemic. With only the essential services functioning, majority of the working community had to resort to work from home or wait till the lockdown ended to resume their business.

Our study focusses on the effects of lockdown and the injuries that were caused by assault, self-infliction and Road traffic accidents. During these three weeks we

unusually observed a surge in such mishaps. Amongst them, assaults were the majority. Treating assaults/injuries of this number in such a short period of time was new to us doctors. However, all of them were treated on emergency basis with no mortality.

Quereshi et al conducted a study to determine the effect of lockdown on incidence of road traffic accidents.⁵ They found a significant reduction in accidents resulting in minor (add numbers) or no injuries, while there was no reduction in accidents leading to fatal injuries. Potential reasons for the latter could be increased speed of traffic due to lower congestion.⁶

There are other reports and documented data which also suggested that although nationwide lockdown had put all modes of transport to a halt, almost 57% of the deaths were because of people driving recklessly. However, there is a study which also mentioned that the mandated societal lockdown resulted in reduced number of RTAs which is a contradiction to our study, where RTA comprised of 19% of the injuries affecting the head and neck area.

A study done by Dubey et al in West Bengal highlighted the need for special attention for obsessive behaviours, depression, anxiety and paranoia caused by this nationwide lockdown which probably led to consequences like assaults and self-infliction seen in our study, similarly reflecting upon psychological impact of the lockdown on the population.⁷

According to a research by Zhang et al increased prevalence of depressive symptoms could be observed among COVID 19 patients.⁸ Several researchers have reported that the sales of alcohol have skyrocketed during pandemic, suggesting people resorting to alcohol consumption as a coping mechanism, which played a role in raise in domestic violence.⁹⁻¹⁴

An online survey study done by Varshney et al used principles of snowballing and invited participants via text and they concluded that there is a need for more systematic and psychological needs of the population which can help create a holistic environment.¹⁵

Singh et al conducted a study in which they aimed at narratively reviewing various articles related to mental-health aspects of children and adolescents impacted by COVID-19 pandemic and enforcement of nationwide or regional lockdowns. The home confinement of children and adolescents is associated with uncertainty and anxiety which is attributable to disruption in their education, physical activities and opportunities for socialization. Absence of structured setting of the school for a long duration result in disruption in routine, boredom and lack of innovative ideas for engaging in various academic and extracurricular activities. Similarly, the assaults could be a result of rage developing as a result of confinement for long duration.¹⁶

Limitations

This study only included head and neck injuries, inspite of several patients presenting with multiple injuries/polytrauma cases. Follow up pertaining to the mental health was not done per se.

CONCLUSION

Since January 2020, various countries started implementing regional and national containment measures like lockdowns, with one of the principal measures taken being closure of schools, educational institutes and activity areas. Several problems emerged following the forced quarantine to combat COVID-19. These inexorable circumstances which are beyond normal experience, lead to stress, anxiety and a feeling of helplessness in all. For better dealing of the disease and the psychosocial issues of the crisis and the society, prevention should be developed on priority basis by the government and the healthcare personnel's. Also, preparedness by setting up mental organizations specific for future pandemics is necessary. There is a need to ameliorate people's access to mental health support services geared towards providing measures for developing healthy coping mechanisms during such crisis.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Trachsler T, Jong W. Crisis management in times of COVID-19: Game, set or match?. *J Contingencies Crisis Manag.* 2020;28(4):485-6.
2. Mikheiev A. The 1918 flu pandemic or Spanish flu. 100 years later (a literature review). *Bukovinian Medical Herald.* 2018;22(87):131-6.
3. Nie W. The origin of quarantine. *Global Partners in Education J.* 2015;5:24-31.
4. Varalakshmi R, Swetha R. Covid-19 lock down: People psychology due to law enforcement. *Asian J Psychiatry.* 2020;51:102102.
5. Qureshi AI, Huang W, Khan S, Lobanova I, Siddiq F, Gomez CR, et al. Mandated societal lockdown and road traffic accidents. *Accid Anal Prev.* 2020;146:105747.
6. Camille KBM, Vicuna P, Mudigonda S, Tchamna R. Mobility Trends in New York City during COVID-19 Pandemic: Analyses of Transportation Modes throughout April 2020, 2020. Available at: <https://files.constantcontact.com/08b78404201/234328d0-d3c2-4846-97a1-3b1daf745b22.pdf>. Accessed on 9 July 2020.
7. Dubey S, Biswas P, Ghosh R, Chatterjee S, Dubey MJ, Chatterjee S, et al. Psychosocial impact of COVID-19. *Diabetes Metab Syndr.* 2020;14(5):779-88.

8. Zhang J, Lu H, Zeng H, Zhang S, Du Q, Jiang T, et al. The differential psychological distress of the populations affected by the COVID-19 pandemic. *Brain Behav Immunity.* 2020;87:49-50.
9. Capaldi DM, Knoble NB, Wu Shortt J, Kim HK. A systematic review of risk factors for intimate partner violence. *Partner Abuse.* 2012;3:231-80.
10. Devries KM, Mak JY, Bacchus J, Child JC, Falder G, Petzold M, et al. Intimate partner violence and incident depressive symptoms and suicide attempts: a systematic review of longitudinal studies. *PLoS Med.* 2013;10:1001439.
11. Leonard KE. Alcohol and intimate partner violence: When can we say that heavy drinking is a contributing cause of violence? *Addiction.* 2005;100:422-5.
12. Field CA, Caetano R, Nelson S. Alcohol and violence related cognitive risk factors associated with the perpetration of intimate partner violence. *J Family Viol.* 2004;19:249-53.
13. Polakovic G. Pandemic drives alcohol sales and raises concerns about substance abuse, 2020. Available at: <https://news.usc.edu/168549/covid-19-alcohol-sales-abuse-stress-relapse-usc-experts/>. Accessed on 9 July 2020.
14. Henson S. Drug and Alcohol Use Increase during COVID 19, 2020. Available at: <https://www.therecoveryvillage.com/drugaddiction/news/drug-alcohol-use-risingduringcovid>. Accessed on 9 July 2020.
15. Varshney M, Parel JT, Raizada N, Sarin SK. Initial psychological impact of COVID-19 and its correlates in Indian Community: An online (FEEL-COVID) survey. *PLoS One.* 2020;15(5):233874.
16. Singh S, Roy D, Sinha K, Parveen S, Sharma G, Joshi G. Impact of COVID-19 and lockdown on mental health of children and adolescents: A narrative review with recommendations. *Psychiatry Res.* 2020;293:113429.

Cite this article as: Smitha SG, Hanumaiah S, Sheeja A. Lockdown 1.0 mishaps in Bangalore: an observational study on head and neck injuries. *Int J Otorhinolaryngol Head Neck Surg* 2021;7:1100-4.