



Misconceptions and myths about COVID-19

Shipra Mandwar, Samiksha Dharampuria, Gargi Nimbalkar*, Kumar Gaurav Chhabra, Amit Reche

Department of Public Health Dentistry, Sharad Pawar Dental College and Hospital, Sawangi (Meghe), Wardha, Maharashtra-442001, India

Article History:

Received on: 26 Oct 2020
Revised on: 09 Nov 2020
Accepted on: 11 Nov 2020

Keywords:

COVID-19,
Myths,
Social media

ABSTRACT

Myths are like wildfire, spreading across the globe in no time. How can this elude the scenario of a pandemic? The COVID-19 pandemics brought several misconceptions under its hood in 2020. No doubt, the major base of the myth was based on virtual and social media platforms. Twitter, Facebook, WhatsApp were exploited to share the myths amongst the crowd for a long time. A massive chunk of the various data in context to the origin, spread and transmission of the virus was found unreliable from these sources. These were later found to be of a great impact on the mental health of the individuals. It was hence essential to create an official portal that gave the correct insight to the Pandemic and also guides individuals regarding their protection and prevention of the disease. This review has been made with an attempt to through light on some myths prevailing about the COVID-19 Pandemic and to bust them under the appropriate facts. Attempts have been made to separate facts from the fiction. In the latter half, various official organisations working in relief against the Pandemic have been discussed for the ease of identification.



*Corresponding Author

Name: Gargi Nimbalkar
Phone: +91-9421703449
Email: garginimbalkar@gmail.com

ISSN: 0975-7538

DOI: <https://doi.org/10.26452/ijrps.v11iSPL1.3630>

Production and Hosted by

IJRPS | www.ijrps.com

© 2020 | All rights reserved.

INTRODUCTION

Covid-19 is an ongoing, highly infectious disease caused by a newly discovered Coronavirus ([World Health Organization, 2020a](#)). It has general symptoms of flu-like sore throat, high-grade fever and difficulty in breathing. It has been declared as Pandemic by WHO. The covid-19 virus spreads among human beings through respiratory droplets and contact routes. Droplet transmission occurs when an individual is in close contact with someone who has

respiratory symptoms like coughing or sneezing and is therefore at the bay of having exposed to infective respiratory droplets.

Droplet transmission can also occur through fomites present in the surrounding vicinity of the infected person. The spread of the Covid-19 virus can occur by direct contact with infected people and indirect contact with surfaces in the vicinity or with objects used on the infected person ([World Health Organization, 2020c](#)). Regular washing of hands, following social distancing along with cleaning and disinfecting, are the ways of preventing transmission of this virus ([Centers for Disease Control and Prevention, 2020](#)).

With the current status quo of the world fighting coronavirus, there is one more thing we need to fight, Myths!! What are myths? Myth is a widespread belief that is not true ([Merriam-Webster, 2020](#)). With hundreds of blooming news channels, newspapers, social media platforms and other internet sources bloom these myths, hoaxes, deceptions about the virus, which eventually becomes an old wife's tale. This review aims

to throw light on various myths that are prevailing amongst people and giving a scientific reason for the myths.

Sources of myths

We come across a variety of information via newspapers, news channels, radio, search engines like Google, social media platforms like WhatsApp, Instagram, YouTube, Twitter, Snapchat, Pinterest, etc (Kunst, 2020). Newspapers, news channels, the official information from the government, health organisations have been considered as authentic sources.

Social media platforms on other side have information that is personal opinion or view which is unfiltered, unverified and circulate throughout the world through text messages, viral video clips, WhatsApp forwards, podcasts, blogs, phone calls which create unnecessary panic in the society. Mouth to mouth spread of information without authentication is another means of spreading myths.

Impact of myths

Myths can create a wide range of impact on mental health and status (Kass-Hout and Alhinnawi, 2013). False circulation of information regarding the number of affected individuals, cured individuals, the spread of this disease and different measures to prevent them without authentication not only creates confusion among people but can also create edginess and agitation (Pulido *et al.*, 2020). It can be in the form of anxiety, fear, restlessness and apprehension.

Incorrect and exaggerated information about Covid-19 virus and its transmission and measures are taken to prevent it such as social distancing and lock down lead people to overbuy and stock products like grocery, medicines and Pandemic related products like sanitisers, masks, gloves, etc.

The market thus suddenly gets out of all the products, and this leads to sudden increased demand. Increased demand results in overpricing due to demand-supply unbalance. And the worst hit of this vicious cycle is financially unstable and poor. The products which were initially affordable by all suddenly become unaffordable for poor people due to black marketing. Unequal distribution of products and resources create havoc among people leading to public gatherings and protests which are not in favour of prevention from spreading of this virus. The struggle for survival causes a person to take unfavourable decisions. This ultimately leads to more transmission of the virus, which tremendously affects individuals and the country as a whole.

Bursting myths about Covid-19

The most common myth discussed around the globe is that the coronavirus does not survive in high temperatures. But the fact is coronavirus has been invariably reported in all geographical zones irrespective of temperatures at that particular zone. Another myth states that being able to hold your breath for more than 30 seconds without discomfort is evidence that you are not affected by Covid-19.

This depends on a patient's lung capacity, smoking habit, underlying respiratory, cardiac or other systemic abnormalities and does not give any proof of being or not being Covid-19 positive (World Health Organization, 2020b).

It was circulated widely that Covid-19 is present and affects a particular community in society. There are no predisposing factors of a particular community for the virus to affect them. The predisposing factors are Diabetes, Hypertension and other debilitating diseases which are invariably present in society irrespective of any caste or community. People believed that a vaccine against Pneumonia would give protection against corona.

This is particularly not correct because the causative agent of Pneumonia and Covid-19 are genetically different, and a vaccine against one cannot provide protection against another (World Health Organization, 2020b).

One of the most astonishing myths around this virus is drinking alcohol can guard you against this disease. Alcohol does not prevent coronavirus from attacking one's body. Besides, it will only add up to degeneration of your body's immune system, further making you vulnerable to the virus. Many claimed that the consumption of non-vegetarian food would improve your chance of contracting Covid-19. There are no proven studies that animals are a carrier of the disease.

The transmission ongoing is from human to human. And with the maintenance of proper hygiene, meat can be consumed. It was circulated vividly that antibiotics can treat the coronavirus. Antibiotics are antimicrobial drugs and do not work against viruses (World Health Organization, 2020b).

Another common myth stated was that Covid-19 only affects the old. The coronavirus affects the individual irrespective of their age. Many cases where young adult populations are corona positive currently exist throughout the world. But the prevalence is more in older age because of debilitated immune systems and other underlying pathologies (Inglesby and Adalja, 2020; Wu and McGoogan, 2020).

It was claimed that consuming hydroxychloroquine

gives 100% protection against the coronavirus. This is not at all true. It indeed provides some immunity but does not assure you of 100% immunity against Covid-19. It is mostly taken by the health professionals and workers who are in constant contact with positive corona patients and should not be consumed by anyone without an authentic prescription. World Health Organization. WHO Director-General's opening remarks at the media briefing on COVID-19 (Sullivan and Powder, 2020).

Another myth stated that mosquitoes could spread the coronavirus. There are no proven studies that mosquitoes are the carrier of this virus. People also claimed that eating garlic provides immunity against the virus. Garlic has some real anti-inflammatory and immune-boosting powers. But there is no paperwork in the literature to prove this and is still a hypothesis (World Health Organization, 2020b).

It was widely circulated that ultraviolet light should be used for sterilization of hands. This should not be done because ultraviolet light does not kill the virus. Apart from this, UV light causes skin irritation and may result in some form of dermatitis and should be avoided entirely. People misunderstood that thermal scanners are used to detect Covid-19 positive patients. The scanners only detect body temperature. It is used so that people on a large scale can be screened and people with high temperatures can be identified and tested for Covid-19 as fever is one of the main symptoms.

It was assumed by many that patients in the early stages are not contagious. This is not proven. Shedding of the virus occurs after the virus has replicated in the host's body. And during replication, most of the patients show symptoms. But few individuals might be asymptomatic, but that doesn't mean that they cannot transmit it to other individuals (Hoehl et al., 2020; Wu and McGoogan, 2020).

One of the myths about Covid-19 virus is that it is transmitted through houseflies. This is false as it is transmitted from person to person, and there are no animal carriers proven yet. The virus that causes Covid-19 spreads primarily through respiratory droplets when an infected person coughs sneezes or speaks. An individual can also become infected by coming in contact with contaminated surface and then touching your eyes, nose or mouth before washing your hands. For prevention, maintaining distance from others and disinfecting regularly is proven to be effective (World Health Organization, 2020b). Myths about quarantine also have to be taken care, and one has to prepare according to the latest authentic information available from the

authentic sources (Reche et al., 2020; Patel et al., 2020).

The myths circulating throughout the globe have no scientific proofs to establish them. People are affected by such myths, and this affects the overall prognosis to fight Covid-19. So the need of the hour is to be aware of our surroundings and not believe the hoaxes and also not to become a part in spreading them. Only authentic sources should be considered for any information regarding the coronavirus. Official site, WhatsApp numbers and helpline numbers have been provided by Government of India (Ministry of Health and Family Welfare, 2020a), with all the correct information, current status and prevention measures. Correct information regarding the virus and its transmission will not only significantly reduce the transmission of the virus and getting hold of it but also reduce panic and help people to follow the standard protocols of social distancing and regular cleaning of hands which in turn will be beneficial for the world to dismantle this Pandemic. Even for the dental practice also there might be some misconceptions, which also have to be dealt with caution (Nimbalkar et al., 2019).

Where to get authentic information?

Organizations like WHO and CDC possess official sites which provide authentic information about the current status, prevention, transmission and other necessary related topics related to coronavirus (Centres for Disease Control and Prevention, 2020). WHO has also provided a WhatsApp number 41798931892 (World Health Organization, 2020d) which shares facts and update about this virus which is true and authenticated.

Government of India and state-wise governments also have their sites which provide sufficient information regarding the same and also provide regional information about affected and recovered individuals (Ministry of Health and Family Welfare, 2020a). Ministry of health and family welfare of India also provides a central helpline number for each state (Ministry of Health and Family Welfare, 2020b). where any individual can have information regarding Covid-19.

CONCLUSION

During this confusing and challenging time, there are tons of rumours and made up hoaxes flooding everywhere. As a responsible citizen in society, every person should make sure to have a sound knowledge and understanding about the virus. One more authority of every individual is not getting car-

ried away by these myths and made up stereotypes as well as preventing their spread. This is only possible by imbibing authentic information and well-established facts. So beware! And assess are you spreading the word or fire?

Conflict of Interest

The authors declare that they have no conflict of interest for this study.

Funding Support

The author declare that they have no funding support for this study.

REFERENCES

- Centers for Disease Control and Prevention 2020. Coronavirus (COVID-19). [Accessed on 24 April 2020].
- Centres for Disease Control and Prevention 2020. How to Protect Yourself & Others. Coronavirus Disease 2019 (COVID-19) [Accessed on 24 April 2020].
- Hoehl, S., Rabenau, H., Berger, A. 2020. Evidence of SARS-CoV-2 infection in returning travellers from Wuhan, China. *N Engl J Med*, 382(13):1278–1280.
- Inglesby, T., Adalja, A. 2020. COVID-19 Myths vs. Realities. Johns Hopkins Bloomberg School of Public Health [Accessed on 20 March 2020].
- Kass-Hout, T. A., Alhinnawi, H. 2013. Social media in public health. *British Medical Bulletin*, 108(1):5–24.
- Kunst, A. 2020. What sources do you actively use to keep informed about the COVID-19 / coronavirus pandemic? Sources of information about the COVID-19 / coronavirus pandemic 2020 [Accessed on 31 May 2020].
- Merriam-Webster 2020. Myth. In Merriam-Webster.com dictionary.
- Ministry of Health and Family Welfare 2020a. Central Helpline Number for corona-virus. Helpline Numbers of States & Union Territories (UTs) [Accessed on 05 March 2020].
- Ministry of Health and Family Welfare 2020b. Information about COVID 19. Government of India [Accessed on 05 May 2020].
- Nimbalkar, G., Dubey, Mandwar, Dharmapuria, Reche, Chhabra, K. G. 2019. Dental practice guidelines in the precariousness of COVID-19: A review. *International Journal of Current Research and Review*, 12(19):82–87.
- Patel, A., Patel, S., Fulzele, P., Mohod, S., Chhabra, K. 2020. Quarantine a useful model for control of the spread of COVID19? A review. *Journal of Family Medicine and Primary Care*, 9(8):3867–3871.
- Pulido, C. M., Villarejo-Carballido, B., Redondo-Sama, G., Gómez, A. 2020. COVID-19 infodemic: More retweets for science-based information on coronavirus than for false information. *International Sociology*, 35(4):377–392.
- Reche, A., Kolse, R., Gupta, S., Ingle, A., Chhabra, K. G. 2020. Therapeutic options for Covid – 19 : Pandemic – A Review. *International Journal of Research in Pharmaceutical Sciences*, 11(SPL1):420–424.
- Sullivan, D., Powder, J. 2020. COVID-19 Myths vs. Realities. Covid-19 School of Public Health Expert Insights [Accessed on 20 March 2020].
- World Health Organization 2020a. Coronavirus disease (COVID-19). [Accessed on 12 October 2020].
- World Health Organization 2020b. Coronavirus disease (COVID-19) pandemic. WHO Director-General's opening remarks at the media briefing on COVID-19 [Accessed on 03 March 2020].
- World Health Organization 2020c. Modes of transmission of virus causing COVID-19: implications for IPC precaution recommendations. Scientific brief [Accessed on 27 March 2020].
- World Health Organization 2020d. WHO Health Alert brings COVID-19 facts to billions via WhatsApp. [Accessed on 06 March 2020].
- Wu, Z., McGoogan, J. M. 2020. Characteristics of and Important Lessons From the Coronavirus Disease 2019 (COVID-19) Outbreak in China: Summary of a Report of 72 314 Cases From the Chinese Center for Disease Control and Prevention. *Journal of the American Medical Association*, 323(13):1239–1242.