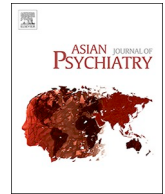




Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



## Letter to the Editor

## Demystifying the myths about COVID-19 infection and its societal importance



## 1. Introduction

Myth is commonly considered as a folklore genre consisting of narratives/stories that play a fundamental role in human beings' everyday lives. These are often endorsed by leaders/rulers/religious preachers and explain to a great extent the functioning of a society and shape the beliefs of people. There is a potential role of cultural and religious beliefs/traditions/customs/rituals, which add a flavor to the public's mindset in a particular region/country and influence the propagation or acceptance of a myth (Morales, 2013). Myths related to various infections have been prevalent from time to time, and it takes a long battle to demystify the existing myths by providing a realistic evidence-based approach. In recent times, some of the common infections, which are have been associated with myths, include Leprosy, Tuberculosis, and Flu (CDC, 2018; Haldimand-Norfolk Health and Social Sciences, 2018; World Health Organisation, 2019). In recent times, the World is facing COVID-19 infection, which has created havoc in the entire World and has affected all aspects of human lives. With the exponential rise in the number of confirmed cases and deaths per day across the World, the health care system has been affected the most. With no potential medication or vaccine developed (to date) against the virus, it is expected that the morbidity and mortality associated with COVID-19 infection is going to increase in the near future.

Despite creating awareness and providing adequate information to the general public through telecommunication (radio, television advertisements, public health messages by prominent celebrities and national leaders) and distributing pamphlets/signboards at public places about infection control measures and mode of spread of the infection, still, there are a large number of myths associated with the spread and cure/treatment of COVID-19 infection in the society. These myths are traveling from one person to the other, through social media platforms. These myths can be very dangerous, as these can lead to over-complacency and lead to a reduction in actually needed practices, or following some of these myths can lead to other health hazards. In this regard, the various health authorities [World Health Organization (WHO), Centre for Disease Control and Prevention (CDC), Ministry of Health and Family Welfare, India etc.] have listed some of the prevailing myths to increase awareness about the infection and have provided factual information about COVID-19 in their websites (Boston, 2020; CDC, 2020; Ministry of Health and Family Welfare, 2020; Myth busters n.d., 2020). Additionally, some of the claims made by other 'pathies' in terms of improvement or boosting of immunity against COVID-19 infection, are being challenged (Boston, 2020; Ministry of AYUSH, 2020). All these had led to further confusion in the mind of the common man.

While the healthcare systems are unable to find a solution/cure to the COVID-19 infection, various facts have emerged, which have low validity and are gradually turning into potential myths related to COVID-19 (Boston, 2020; Carbone et al., 2020; Myth busters n.d.,

2020). We need to understand that, when we consider something as useful or efficacious in managing or preventing a health condition, the intervention, should undergo a well-designed, adequately powered double-blind randomized controlled trial (DB-RCT). Further, as per the levels of evidence even a cohort or case-control study or any degree of evidence based on case series/case reports or expert opinions can be considered to be a trial to render an intervention to be propagated as justifiable or for the need to be tested (Burns et al., 2011; "CEBM- The Centre for Evidence Based Medicine," 2020; Sackett, 1989). Till the time any intervention has been unequivocally proved to be efficacious by any of the above-mentioned types of studies, the same should not be claimed as efficacious. In this background, if we look at the various claims made for improving the immunity and resultant prevention of COVID-19, many of these have not been subjected to the rigorous evaluation. Hence, all such claims can be questioned. However, if these are propagated as efficacious or useful, these will also boarder on to be labeled as myths.

Currently, prevailing myths related to COVID-19 infection can be categorized into those related to the spread of infection, source of spread of infection, preventive measures, and cure. Some of the commonly prevalent myths related to COVID-19 infection are listed in Table 1.

The myths listed in the table have been discussed so as to disseminate knowledge and information with regard to COVID-19 (Tandon, 2020) as these are being circulated on various social media platforms and can be regarded as a potential source of anxiety related to COVID-19. Those myths related to spreading/transmission of COVID-19 have been bothering the public to think twice before using newspapers/vegetables etc. and many are avoiding non-vegetarian foods with the fear of being infected. Further, many have hoarded or stockpiled antibiotics, essential oils, Vitamin C tablets, masks, sanitizers, etc. to protect themselves from running out of stock of these commodities. These myths can also lead to a false sense of security of being immune to the infection and resultant exposure to high-risk situations.

Harboring such myths can be detrimental to society as all these create a hue and cry and chaos among the people. People need to understand that spreading such information can be punishable. In this regard, the Cyber Police/Cyber cell has been active ("WhatsApp Admin Warned For Fake Coronavirus Post, 2020) and have traced all those persons circulating wrong messages and tried to demystify many myths through telecommunication awareness programs (DelhiMarch 20., I.G.N., March 20, 2020). There have been instances of persons being heavily fined or being arrested when found to be spreading false claims of treating/curing COVID-19 (Bhandari, 2020a).

If we compare the myths related to COVID-19 with myths related to leprosy, tuberculosis and Flu, there are some commonalities about the major themes of myths, i.e., the myths mainly prevail around the causation, disease transmission, and cure. However, the COVID-19 infection has emerged very recently and affected almost all the countries

**Table 1**  
Myths related to COVID-19 infection (Compiled from various sources: WHO website, newspaper articles).

Serial no	Myths	Assumptions based on the myth	Truth/reality evidence	Remarks/message needs to be delivered to public
<b>Related to the prevention of COVID-19 infection</b>				
1	Eating garlic, turmeric, and/or lemon (and other foods commonly used as home remedies for flu and the common cold) can help prevent Covid-19 infection.	Garlic and turmeric have antimicrobial properties. Vitamin C is an essential vitamin that can support immune function.	No evidence in the form of a DB RCT from the current outbreak that garlic or lemon (or vitamin c rich foods) can protect someone from getting COVID-19 infection	Most of the Indians use garlic, turmeric, and lemon in their daily foods. No additional benefit is ensured if taken in excess amounts. The government and Ayush advisory mention these to be useful to improve immunity, not as preventive strategies.
2	Regularly rinsing with salt water or saline can help prevent COVID-19 infection.	The virus dies in salty water.	No evidence that regularly gargling has protected people from COVID-19 infection.	While this strategy may help soothe a sore throat due to any flu-like infection, however, this practice will not prevent anybody from developing COVID-19 infection if exposed to the same.
3	Drinking warm water and getting enough sunlight are effective in preventing COVID-19.	Heat or warm fluids kill the virus.	No evidence that the nCoV-SARS virus can be killed at higher temperatures.	Drinking warm water and getting enough sunlight may have other health benefits. Sunlight is good to get Vitamin D, which has a role in modulating the innate and adaptive immune responses. But too much exposure to sunlight may also lead to sunburn.
4	Taking a hot bath can prevent COVID-19 disease.	Heat kills the virus.	Taking a hot bath will not prevent you from contracting COVID-19.	Taking a hot bath with extremely hot water can be harmful, as it can cause burns to the body.
5	The COVID-19 infection cannot be transmitted in areas with hot and humid climates.	Heat kills the virus.	The COVID-19 virus can be transmitted in all areas, including areas with hot and humid weather.	Only infection control measures and adequate hand hygiene can prevent the infection
6	Hand dryers are effective in killing the novel coronavirus.	Heat kills the virus	No evidence	Only infection control measures and adequate hand hygiene can prevent the infection
7	Spraying alcohol or chlorine all over your body can kill the COVID-19 virus.	Since alcohol is used in sanitizers and chlorine is used in hypochlorite solutions, it can be used to kill the virus from the body by applying it all over.	Spraying alcohol or chlorine all over your body will not kill viruses that have already entered the body.	Spraying such substances can be harmful to clothes or mucous membranes (i.e., eyes, mouth). Both are used to disinfect surfaces, but they need to be used in appropriate proportion/quantities under appropriate recommendations
8	Sniffing/inhaling alcohol can protect from developing the COVID-19 infection.	Alcohol can kill any virus which has entered the respiratory tract.	No evidence for the protective effect of alcohol inhalation against COVID-19 infection	No evidence for the protective effect of alcohol inhalation against COVID-19 infection
9	Vaccines against pneumonia can protect you against the COVID-19 infection.	Vaccines against pneumonia, such as pneumococcal vaccine and Haemophilus influenza Type B vaccine, do not protect against the novel coronavirus.	Vaccines against pneumonia, such as pneumococcal vaccine and Haemophilus influenza Type B vaccine, do not protect against the novel coronavirus.	Researchers across the world are trying to develop a vaccine against COVID-19.
10	Wearing a mask or N95 mask can only prevent the transmission of COVID-19.	Masks protect from inhaling the virus-laden air	There is evidence that masks can prevent an asymptomatic patient of COVID-19 from spreading the virus.	Only masks won't help, but proper and adequate infection control measures, social distancing, appropriate use of masks, and hand hygiene is the best possible solution to prevent getting infected.
11	Drinking alcohol can cure COVID-19.	Alcohol is present in alcohol sanitizers which kills the virus, therefore consuming alcohol can cure/prevent getting the infection.	No evidence to suggest that alcohol intake can protect from getting infected. In fact, alcohol use and subsequent intoxication can affect the social distancing norms, impair hand hygiene, and other infection control measures, and pose an imminent risk of contracting the infection.	Alcohol intake should be reduced or avoided to follow the infection control measures and social distancing
12	Using cow dung and cow's urine can cure the virus.	Cow's urine is the most sacred thing on Earth, and it can purify one's body from all types of infection.	No evidence	No evidence to suggest that of cow's urine in the treatment or prevention of COVID-19.
13	Religious chants can protect from the virus/ Clapping hands creates vibrations that destroy the coronavirus	Clapping hands creates sound waves, and the sound produced is sensed through the vibrations of our eardrums, which then creates oscillations in the fluid in our inner ear and increases our ability to fight with the virus.	No evidence regarding this. The vibration created by chanting would not even be sensed by something as small as a virus.	Chanting and religious discourses with clapping hands can be an effective coping skill to combat stress and anxiety related to COVID-19. It boosts up the mood and calms the mind.
<b>COVID-19 Infection Transmission</b>				
1	The new coronavirus can be transmitted through mosquito bite.	-	No evidence that mosquitoes can transmit the COVID-19 infection.	No need to worry about the relationship between mosquito bites and developing the COVID-19 infection.
2	Pets at home can spread the COVID-19 virus.	Animals spread the COVID-19 as it was detected in the China meat market.	At present, there is no evidence that pets can transmit the COVID-19 infection.	No need to worry about the disease being transmitted by pets

(continued on next page)

**Table 1** (continued)

Serial no	Myths	Assumptions based on the myth	Truth/reality evidence	Remarks/message needs to be delivered to public
3	Non-vegetarian food (meat/eggs/fish/chicken) consumption can lead to infection	Meat consumption had spread the COVID-19 as it was detected in the China meat market.	No evidence to suggest that the COVID-19 can be transmitted by eating properly cooked non-vegetarian foods	No need to worry. People can safely consume all types of properly cooked non-vegetarian products
4	Donating blood can result in acquiring COVID-19 infection.	Donating blood can reduce the immune system, and one gets more vulnerable to contract the infection.	No evidence that COVID-19 can be transmitted by blood donation	COVID-19 period should not be a barrier to blood donation. Any healthy person can donate blood.
5	You would be at risk if someone infected in housing complex/neighborhood	The virus spreads in the entire air, and all around the infected person can be infected.	The real fact is that one cannot get infected if he/she maintains a two-meter distance from the infected patient, wears a mask, and avoids touching contaminated things. Practicing adequate hand hygiene and infection control measures can prevent from getting infected.	The public should be empathetic towards the patients with COVID-19 or people suspected of having COVID-19 and under home isolation/ quarantine. Maintaining adequate distance and infection control measures can help them in reducing the risk of getting infected.
6	Ordering or buying products shipped from overseas will make a person sick.	Fomite transmission	As per the WHO, the likelihood of becoming infected with COVID-19 from a commercial package is low since it has likely traveled over several days and had been exposed to different temperatures and conditions during transit.	The potential risk of getting infected from overseas products is minimal /negligible.
7	Newspapers, milk packets, and vegetables can transmit the infection.	Virus remains on newspapers and milk packets for a long time	No evidence of newspapers being potential carriers of COVID-19 had been proved. There is no risk of contracting the illness through newspapers or any packages, and no current data/research suggests that the virus can survive on paper for long hours. Following the hand hygiene measures, while touching the milk packet, may be sufficient to avoid the development of COVID-19 infection.	No need to panic and avoid buying newspapers/milk products/vegetables. Practice hand hygiene measures to prevent from getting infected.
8	COVID-19 infection can be transmitted from the mother to the child/fetus during the process of birth/delivery or pregnancy	Pregnant females are at the highest risk of transmitting the infection to baby/fetus during pregnancy or during childbirth.	To date, there is no data (as per WHO), to the effect that a pregnant female with COVID-19 can pass the virus to her fetus or baby during pregnancy or process of childbirth. The active virus has not yet been found in samples of amniotic fluid.	The public needs to be reassured that pregnancy and childbirth are safe, and the same precautions are to be taken by pregnant women as the general population.
9	Pregnant women with suspected or confirmed COVID-19 need to give birth by cesarean section (CS) only.	Virus can spread through normal vaginal delivery.	The WHO clearly advises that CS should only be performed when medically indicated/ justified. The mode of birth should be individualized and based on a woman's preferences alongside obstetric indications.	CS should not be asked unless indicated by the treating obstetrician.
10	If pregnancy occurs, there is a high risk of miscarriage, abortion, or congenital malformations due to COVID-19.	Pregnancy is risky during COVID times.	There is currently no evidence to support that acquiring COVID-19 predisposes to a heightened risk of miscarriage. There is also no reported evidence to suggest that the virus will cause any problem with fetal development. Although some reports of preterm delivery and neonatal pneumonia have been reported, however currently the adverse pregnancy outcomes in few reports cannot be attributed to COVID-19 only.	No need to worry if one gets pregnant during COVID-19 pandemic.
11	COVID-19 infection can be transmitted through breast milk to the newborn/breastfeeding.	Breast milk can carry the virus to the baby.	Till date (as per WHO), the virus has not been detected in the breast milk of any mother with confirmed or suspected COVID-19 infection. Researchers are continuing to test breast milk from COVID-19 mothers.	It is very unlikely that breastfeeding can spread the virus. Breast milk in all settings improves survival and provides lifelong advantages to newborns. Following delivery, the WHO recommends that the baby needs to be provided with skin-to-skin care, including kangaroo care with adequate respiratory hygiene and hand hygiene measures and breastfeeding the baby.
12	All health care workers (HCWs) are a potential source of COVID-19 infection.	HCWs are exposed to patients with COVID-19 infection.	HCWs are regarded as the front line warriors for tackling with COVID-19 infection. They are well-equipped with personal protective equipments (PPEs), which protect them against contracting COVID-19 infection.	There is an urgent need to create awareness in the general public that HCWs take all safety measures to protect themselves from getting infected.
13	Someone without symptoms cannot spread the infection.	Respiratory symptoms are mandatory to be present to spread the virus.	Most of the patients are asymptomatic and can spread the disease, so adequate social distancing and hand hygiene	There is no need to worry or to panic when they come near any HCWs.

(continued on next page)

Table 1 (continued)

Serial no	Myths	Assumptions based on the myth	Truth/reality evidence	Remarks/message needs to be delivered to public
14	All those who been quarantined because of travel history had developed the COVID-19 infection.	Foreigners or Indians who had recently returned from abroad had spread the COVID-19 infection.	About 90 % of the patients with confirmed COVID -19 infection are asymptomatic and hence are potential carriers of virus. The COVID-19 infection gradually spread across the World since its outbreak in China to almost all countries. However, it is not true that anyone who has a positive travel history to abroad is harboring COVID-19 infection.	Quarantine means under observation. Therefore, those who had returned from abroad are kept under quarantine to check for any development of symptoms to detect for COVID-19. This does not mean that they are already infected with COVID-19. The public should be made aware that those recovered do not carry the virus potential for infection and must be accepted back in the community with due respect.
15	Someone who has recovered from COVID-19 infection can still spread the infection.	Once a COVID-19 patient always a patient, i.e., a patient carries the virus even if recovered.	Once recovered or tested negative as per WHO (RT-PCR) viral testing, the person is declared recovered i.e., he/she is immune to the infection and has developed immunity or antibodies against the COVID-19 and therefore, they are absolutely safe, and they cannot transmit the infection.	Sexual intercourse with a steady partner with no contact history does not pose any risk of infection. However, sexual intercourse with unknown people should be avoided as their COVID-19 status cannot be confirmed
16	Unprotected sexual intercourse can lead to spreading of COVID-19 infection.	Sexual intercourse can spread the virus.	Unprotected sexual intercourse with a steady partner with no contact history who is not known to be infected with COVID-19 poses no risk of transmission of COVID-19. To date, the virus had been detected in only a few cases in the seminal fluid of infected persons.	WHO advises people of all ages to take all adequate steps to protect themselves from the virus (good hand hygiene and good respiratory hygiene)
<b>COVID-19 infection-related myths</b>				
1	COVID-19 affects only older people.	More deaths reported in elderly worldwide	The new coronavirus can infect people of all ages. Older people and people with pre-existing medical conditions (such as asthma, diabetes, and cardiovascular diseases) are more vulnerable to acquiring infection due to poor immunity.	
2.	People who get the coronavirus/COVID-19 will die.	Nature is trying to revive, and COVID-19 is Nature's or God's way to reduce population.	About 80 – 90% of persons infected with COVID-19 are asymptomatic or have milder flu symptoms, and the death rate is below 2%.	Not to panic or get afraid if you are infected with COVID-19. In most of instances, it will be a milder form of flu-like illness. The HCWs will take appropriate measures if the condition worsens (which is seen in 8 – 10% cases), mostly in those with pre-existing chronic medical illnesses.
3.	The Indian Immune system is better than the West, and thus, Indians will survive Covid-19 infection better.	Indians have a good diet and more robust and hard-working so COVID-19 can't affect us.	No such comparative data on the immune system of Indians Vs. West is available.	Need to consider that people of all ages, of all races and ethnicity, are equally prone to contract the COVID-19 infection
4.	COVID-19 can be treated by colloidal silver, vitamins, teas, and essential oils.	These materials have anti-bactericidal and anti-viral properties.	No evidence for any special role for colloidal silver, vitamins, teas, and essential oils in dealing with COVID-19.	Not to follow/believe any such procedures or unless approved by the National and International Health authorities.
5.	Having had malaria makes one immune.	Chloroquine or Hydroxy Chloroquine is being used to treat COVID-19, which is an anti-malarial drug.	No evidence yet in this regard. If this was true, then considering India to be the Malaria capital of the World should have low case load, which is untrue.	People should take adequate measures to remain protected from getting infected by malaria as well as COVID-19.
6.	Anti-bacterial drugs are effective for therapy of COVID-19	-	COVID-19 is a viral infection; therefore anti-bacterial agents are not effective for treating COVID-19 but are useful for treating secondary bacterial infections.	No need to stock/ pile antibiotics and always use antibiotics rationally and only when advised by a medical practitioner.
<b>Miscellaneous</b>				
1.	Hand sanitizers are better than soap and water.	Alcohol-based sanitizers are the most potent disinfectants.	Hand hygiene measures by either alcohol sanitizers or soap and water are equally effective in protecting one from getting infected.	No need to buy hand sanitizers or hoard sanitizers. Simple soap and water is an equally effective strategy that can be followed.
2.	Thermal scanners can detect COVID-19	-	Thermal scanners can only detect fever, which is one of the usual symptoms of COVID-19, but a person infected with COVID-19 may take 2–10 days after infection to develop fever.	Not 100 % effective screening method.
3.	If the public water supply is contaminated with COVID-19, the entire community will be infected.	-	No evidence that the virus can spread through the water supply. In fact, the treatment in water facilities/ having a good shower can protect from getting infected.	No need to believe in this myth.

(continued on next page)

Table 1 (continued)

Serial no	Myths	Assumptions based on the myth	Truth/reality evidence	Remarks/message needs to be delivered to public
4.	Those immunized with BCG are more likely not to get COVID-19 infection	BCG vaccine improves immunity against all infections.	There is no evidence that the BCG vaccine protects people against infection with COVID-19. WHO to date has not recommended BCG vaccination for prevention of COVID-19, few trials are underway though.	BCG Vaccination prevents severe forms of Tuberculosis. In the absence of evidence regarding any efficacy of BCG in COVID-19, people should refrain from believing the BCG vaccine is protective against COVID-19. It can lead to a false sense of security and hence should not be believed unless proved.
5.	No vaccine can be developed against COVID-19 infection.	God has sent COVID-19 as a declaration suggesting the end of the human race.	Researchers are actively engaged in developing a vaccine against COVID-19. However, clinical trials on a vaccine for COVID-19 may take a long time (months) to reach definite results.	The public needs to keep patience and to wait until any news about the vaccine is published by trustworthy websites/news or declared by the WHO. Refrain from believing on any random news about the vaccine being discovered

DB RCT – Double blind Randomised controlled trial.

of the World in a short span of time. Accordingly, the myths related to its spread, transmission are much more. This is complicated because there is social media's availability to almost everyone in the World. Hence, these myths spread very fast and extensively across the globe. Further, lack of any potential medicine/cure/vaccine has also led to the emergence of multiple claims about the various aspects of COVID-19 infection.

Some of the facts that are not yet clear, but there is some evidence to support the same. Accordingly, these facts cannot be labeled as myths. Emerging evidence suggests that there could be the faeco-oral transmission of COVID-19 infection or SARS-nCoV-2. Recent studies indicate that prolonged viral shedding in feces is seen in symptomatic patients with COVID-19 as well as in those recovered from COVID-19 (more so in children) (Wu et al., 2020; Xu et al., 2020; Yeo et al., 2020). Therefore, as the research evidence is growing at a faster rate about different aspects of COVID-19, we need to be aware of the potential facts about the illness and not to believe in any facts which have no authentic evidence or not claimed by any International Health body (like WHO).

## 2. Interaction between myths related to COVID-19 and public stigma

The very nature of the myth is that it gets publicized widely in a very short time, and people tend to follow a myth without questioning its authenticity or evidence for/against a myth. Moreover, during a pandemic, crowd psychology plays a major driving force in believing and practicing a ritual/procedure to find a solution. Certain acts/beliefs can enhance public stigma related to COVID-19. Both myths and public stigma get combined, shaping society's behavior toward disease and those infected by the same. Many myths related to the spread of infection are compounded with the stigma associated with patients recovered from COVID-19 infection and the health care workers (HCWs), working in COVID-19 wards/hospitals. These are leading to a social boycott of people such as debarring HCWs to stay in the same housing society (Bhandari, 2020b; COVID-19: Doctors, beaten and harassed plan, 2020), asking them to stay away from the public, avoiding interaction with the persons recovered from COVID-19 infection or those suspected of having COVID-19 infection, etc.

Therefore, a proper and planned awareness program taking into account all the stakeholders is the need of the hour, which can help change society's outlook from following the unhealthy/un-acceptable norms/myths to acceptable/healthy evidence-based norms.

The Government and the media have a significant role in dealing with the prevailing and emerging myths related to COVID-19 infection. One of the main responsibilities of the Government and the health care authorities is to deal with the widely prevalent and rapidly spreading new misconceptions/myths related to COVID-19. If these are not curtailed, then these can be very detrimental. Leaders/health officials should look at the evidence before endorsing anything related to spreading, prevention and treatment of COVID-19 infection, and leaders/health officials should look at the evidence, rather than blindly supporting the same. Additionally, if something is found to be of use, for example, some of the things, which are claimed to improve the immunity, and then the leaders/health officials should clearly state that the evidence of generic nature, rather than specific for COVID-19 and the strategy has not been evaluated specifically for COVID-19.

Further, they should say that these strategies are not a substitute for the proven hand hygiene measures, use of masks, and maintaining physical distancing. More awareness activities and messages should be delivered through all possible means (Telecommunication/advertisements /distributing pamphlets/ holding public webinars etc.) to counter the emerging myths. Additionally, strict legal action needs to be taken against people spreading fake news/making false claims during the pandemic. More and more stringent action and punishments must be declared by the Judiciary system to control the spread of

myths/fake claims. The mainstream media should also be very cautious in presenting the different information about the COVID-19 infection. Media, in its enthusiasm, should not try to discuss the studies evaluating the scientific evidence for various issues related to COVID-19 infection, until and unless these have some public message and have been proved unequivocally.

The public should be made aware that they should always follow authentic websites such as WHO website, CDC website or Ministry of Health and Family Welfare website of India (mohfw.in) to gain knowledge and stay updated regarding COVID-19. The public should be made aware of questioning the authenticity or level of evidence of a publicized treatment or strategy being circulated or advocated by any person or group of persons before believing any fact blindly. Further, awareness should be raised to follow the evidence-based preventive measures such as hand hygiene, social distancing, and infection control measures to safeguard against getting infected.

### 3. Conclusions

Myths have been widely prevalent about various diseases since time immemorial. Myths have a cultural influence and can have a varying degree of impact over the society. Many myths have been related to other infections (Leprosy, Tuberculosis, Flu/Influenza), but with time and evidence-based approaches, these have proved to be wrong. The current COVID-19 pandemic and its uncertainty had given rise to various myths. Some of these myths are leading to widespread stigma in society. Additionally, these myths have the potential of making people over-complacent and resultantly more at risk of developing the infection.

All these myths are having a widespread impact on public viewpoint and disease transmission. Therefore, possible and prompt steps should be taken by appropriate authorities to demystify the myths in due time. Considering the current status of COVID-19 infection to be so dynamic, people should evaluate things properly, before considering them to be useful.

### Financial disclosure

We have no financial disclosure to make.

### Declaration of Competing Interest

The authors declare that they have no conflict of interest.

### Acknowledgements

None.

### References

- Bhandari, S., 2020a. "Corona Wale Baba": Godman Claims to Cure Coronavirus. arrested [WWW Document]. URL <https://www.indiatvnews.com/news/india/corona-wale-baba-fake-godman-coronavirus-cure-covid-19-arrested-up-police-598272> (accessed 5.9.20).
- Bhandari, H., 2020b. Doctor harassed by his dwarka housing society. *The Hindu*.

- Boston, 677 Huntington Avenue, 2020. Myths vs Facts. India Res. Cent. URL <https://www.hsph.harvard.edu/india-center/myths-vs-facts/> (accessed 5.6.20).
- Burns, P.B., Rohrich, R.J., Chung, K.C., 2011. The levels of evidence and their role in evidence-based medicine. *Plast. Reconstr. Surg.* 128, 305–310. <https://doi.org/10.1097/PRS.0b013e318219c171>.
- Carbone, M., Green, J.B., Bucci, E.M., Lednický, J.A., 2020. Coronaviruses: facts, myths, and hypotheses. *J. Thorac. Oncol. Off. Publ. Int. Assoc. Study Lung Cancer* 15, 675–678. <https://doi.org/10.1016/j.jtho.2020.02.024>.
- CDC, 2018. World Leprosy Day [WWW Document]. *Cent. Dis. Control Prev.* URL <https://www.cdc.gov/features/world-leprosy-day/index.html> (accessed 5.7.20).
- CDC, 2020. Coronavirus Disease 2019 (COVID-19). [WWW Document]. *Cent. Dis. Control Prev.* URL <https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/share-facts.html> (accessed 5.6.20).
- CEBM, 2020. The Centre for Evidence Based Medicine [WWW Document]. *CEBM.* URL <https://www.cebm.net/> (accessed 5.9.20).
- COVID-19: Doctors, beaten and harassed, plan silent protest across India [WWW Document], n.d. URL <https://gulfnnews.com/world/asia/india/covid-19-doctors-beaten-and-harassed-plan-silent-protest-across-india-1.1587542229648> (accessed 5.9.20).
- DelhiMarch 20., I.G.N., March 20, 2020UPDATED: Ist, 2020 02:23, n.d. AIIMS chief debunks 9 coronavirus myths [WWW Document]. *India Today.* URL <https://www.indiatoday.in/mail-today/story/aiims-chief-debunks-9-coronavirus-myths-1657640-2020-03-20> (accessed 5.7.20).
- Haldimand-Norfolk Health and Social Sciences, 2018. Myths Associated With Tuberculosis.
- Ministry of AYUSH [WWW Document], n.d. URL <https://www.ayush.gov.in/> (accessed 5.6.20).
- Ministry of Health and Family Welfare, 2020. COVID-19 INDIA [WWW Document]. URL <https://www.mohfw.gov.in/>.
- Morales, S.S., 2013. Myth and the construction of meaning in mediated culture. *Int. J. Pure Commun. Inq.* 1, 33–43.
- Myth busters [WWW Document], n.d. URL <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/myth-busters> (accessed 5.6.20).
- Sackett, D.L., 1989. Rules of evidence and clinical recommendations on the use of anti-thrombotic agents. *Chest* 95, 2S–4S.
- Tandon, R., 2020. The COVID-19 pandemic, personal reflections on editorial responsibility. *Asian J. Psychiatry* 50, 102100. <https://doi.org/10.1016/j.ajp.2020.102100>.
- WhatsApp Admin Warned For Fake Coronavirus Post: Police [WWW Document], n.d. NDTV.com. URL <https://www.ndtv.com/india-news/whatsapp-admin-warned-for-fake-coronavirus-post-police-2194688> (accessed 5.7.20).
- World Health Organisation, 2019. 5 Myths About the Flu Vaccine [WWW Document]. URL <https://www.who.int/influenza/spotlight/5-myths-about-the-flu-vaccine> (accessed 5.7.20).
- Wu, Y., Guo, C., Tang, L., Hong, Z., Zhou, J., Dong, X., Yin, H., Xiao, Q., Tang, Y., Qu, X., Kuang, L., Fang, X., Mishra, N., Lu, J., Shan, H., Jiang, G., Huang, X., 2020. Prolonged presence of SARS-CoV-2 viral RNA in faecal samples. *Lancet Gastroenterol. Hepatol.* 5, 434–435. [https://doi.org/10.1016/S2468-1253\(20\)30083-2](https://doi.org/10.1016/S2468-1253(20)30083-2).
- Xu, Y., Li, X., Zhu, B., Liang, H., Fang, C., Gong, Y., Guo, Q., Sun, X., Zhao, D., Shen, J., Zhang, H., Liu, H., Xia, H., Tang, J., Zhang, K., Gong, S., 2020. Characteristics of pediatric SARS-CoV-2 infection and potential evidence for persistent fecal viral shedding. *Nat. Med.* 26, 502–505. <https://doi.org/10.1038/s41591-020-0817-4>.
- Yeo, C., Kaushal, S., Yeo, D., 2020. Enteric involvement of coronaviruses: is faecal–oral transmission of SARS-CoV-2 possible? *Lancet Gastroenterol. Hepatol.* 5, 335–337. [https://doi.org/10.1016/S2468-1253\(20\)30048-0](https://doi.org/10.1016/S2468-1253(20)30048-0).

Swapnajeet Sahoo

Department of Psychiatry, Post Graduate Institute of Medical Education and Research, Chandigarh, 160012, India

Susanta Kumar Padhy, Jigyansa Ipsita

Department of Psychiatry, All Indian Institute of Medical Sciences, Bhubaneswar, India

Aseem Mehra, Sandeep Grover\*

Department of Psychiatry, Post Graduate Institute of Medical Education and Research, Chandigarh, 160012, India  
E-mail address: [drsandeepg2002@yahoo.com](mailto:drsandeepg2002@yahoo.com) (S. Grover).

\* Corresponding author.