

RESEARCH ARTICLE**Doctor-patient relationship and public trust in health science in post-COVID world:
Lessons from USA and India****Author**

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Building better trust between doctors and patients is key to improving the standard of healthcare delivery system in rich and poor countries alike. Trust between doctors and patients depends on a variety of ill-defined factors that include physician behavior, skill, cost of healthcare and societal perception of integrity of the medical community. Mode of practice of medicine has undergone radical changes during the COVID-19 pandemic with frequent use of PPE and long-distance video consultancy. COVID-19 pandemic has caused enormous pain, suffering and death across the globe. While many morbidities and mortalities due to COVID-19 were inevitable, gross medical mismanagements of COVID-19 have also contributed to increased rate of death of COVID-19 patients in many countries. Most importantly, shocking political intrusion of medical science during the COVID-19 pandemic has caused unprecedented erosion of public trust in the medical profession in several countries, particularly in USA and India. Top medical leaders in the Center for Disease Control (CDC) and Food and Drug Administration (FDA) in USA, the “gold standard” medical authorities, stood speechless next to the USA president, Donald Trump, as he brazenly made numerous false, unscientific and dangerous claims to prevent and cure COVID-19. Top government healthcare authorities in India also spread misinformation and baseless claims about COVID-19 morbidities and mortalities to misguide ordinary people. While some devious medical leaders shamelessly supported the bogus claims under sinister pressure from their political leaders, other doctors around the world made tremendous selfless sacrifice and stepped forward to save the victims of COVID-19 even at the risks to their own lives. Although there is little doubt that experience during the COVID-19 pandemic may have significant impact on public trust in the medical profession in the future, whether doctor-patient relationship will improve or deteriorate in the post-COVID world remains uncertain at this juncture. But it is imperative that the medical community must send a strong and clear message now disparaging any exploitation of the scientific evidence on COVID-19 pandemic in fear of any political or medical retribution.

A. Introduction: Traditional factors in doctor-patient relationship

Mutual trust between doctors and patients plays a key role for building strong doctor-patient relationship that forms the foundation for an efficient healthcare delivery system and good practice of clinical medicine. Although sufficient empirical research is still lacking to fully understand various aspects of patients' "trust" on the physicians, it is clear that a variety of factors, both social and personal, are important in this complicated equation between the patient and his/her doctor. The factors critical for nurturing people's trust in the medical profession may also differ between the developing countries with poor socioeconomic condition and developed nations with more robust economy and superior medical infrastructure. Different models have been proposed to explain the complex role played by patients' expectations and physicians' ethical values for the eventual bonding between doctors and patients¹. Multidimensional physical as well as social attributes including physicians' level of compassion, competence, reliability and communication skill have been reported to play critical role in fostering trust of the patients^{2,3}. However, there is little doubt that the elements vital for trust between doctors and patients also keep changing over time with the evolving nature of medical science and new social as well as political threats to the healthcare delivery system⁴. With the rapid increase in healthcare cost, commercialization of drugs and intrusion of politics in medicine, new hazards linked to "conflict of interests" and indecent "financial incentives" for the physicians have emerged

as matter of concerns for the patients in the recent years. But perhaps nothing in the history of medicine has caused a more profound effect on doctors and patients alike than what the novel SARS-CoV-2 virus, causative agent for the COVID-19 pandemic and phylogenetically related to the 2002 outbreak of the "severe acute respiratory syndrome" (SARS) coronavirus, has caused across the globe over the past 18-19 months. Considering the universal and overwhelming effects of SARS-CoV-2 infection in the society at large, COVID-19 pandemic is likely to have a significant impact on doctor-patient relationships in the future. But whether public trust on doctors would sway in a positive or negative direction in the post-COVID-19 world remains unclear at the present moment.

B. Changes in medical practice during COVID-19 pandemic

During the long and still ongoing course of a rampaging COVID-19 pandemic, medical community was forced to make radical changes in the mode of interactions with patients that may have enduring effects on the healthcare delivery system and public trust in the post-COVID world. Over the past almost one and a half year during the COVID-19 pandemic, medical consultations in most clinics were conducted remotely through a virtual mode using the Zoom, WebEx, Microsoft Teams or other online platforms. And even on the occasional face-to-face meetings in the doctor's chamber, patient's communication with a muffled voice through the mask is never the same as it was during normal conversations with your doctor in his

chamber prior to the pandemic. COVID-19 has forced the patients to be separated from their doctors both physically and emotionally with the advent of PPE and virtual meetings. Although the ultimate effects of these unprecedented physical changes in the interactions between doctors and patients remain unclear at the present time, personal empathy and emotional bonding that frequently developed between a doctor and his patient during the uninhibited and candid physical examination in the past would be more difficult to build by video consultation through the ZOOM or WebEx. Loss of personal and emotional connection with the patients during the COVID-19 pandemic are likely to have a lasting and perhaps negative impact on doctor-patient relationship in the future.

On the other hand, COVID-19 pandemic has shined light to the tremendous sacrifice by doctors and healthcare workers, often taking risks to their own lives, who stepped forward only to save the lives of the ailing patients and senior citizens infected with the highly contagious new coronavirus⁵. Many doctors and healthcare workers also succumbed to COVID-19, contracting the lethal virus while taking care of the infected patients. The media has also widely reported these heart-rending stories about doctors and nurses who worked tirelessly and risked their own lives to protect people from the ravaging COVID-19 pandemic⁶. Unfortunately, the positive medical stories during the COVID-19 pandemic have been marred by regular news of pain, suffering and massive loss of human lives – all frequently blamed on the malfunctioning and corruption in the

healthcare system. One can only hope that the love and respect shown by the ordinary people for the medical community for their selfless sacrifice during the COVID-19 pandemic would translate to enhanced tolerance for our healers in the future.

C. COVID-19 and political intrusion of medical science

COVID-19 was undoubtedly a sudden and unexpected blow to the world of medicine. SARS-CoV-2 virus was first found in Wuhan, China in December, 2019 and within a span of only 3-4 months, World Health Organization (WHO) had to declare COVID-19 pandemic with over 400,000 cases across the globe⁷. More than 166 million people are already infected with almost 3.5 million confirmed deaths worldwide as a result of the COVID-19 pandemic with the two top nations with the highest number of infected people are in USA and India with 32.7 and 26.7 million cases, respectively; according to the latest numbers available from WHO at the time of preparation of this manuscript⁸. Deaths from COVID-19 in USA and India stand at 584,153 and 303,720, respectively; and Brazil with 448,208 stands only second in the number of people died from the COVID-1 pandemic⁸. Although spread of COVID-19 in the European and many other countries was also of alarming proportion, devastation in USA and India during the COVID-19 pandemic has truly been spectacular. While the acute crisis with COVID-19 in USA has substantially improved over the past 5 months with the implementation of a massive vaccination program by a new government⁹, situation in

India has spiraled downward with a rampaging COVID-19 “second wave”¹⁰. But why COVID-19 pandemic caused such an exceptional wreckage in USA and India, two largest democracies in the world?

Although there can be no dispute that the unique nature and high virulence of the novel coronavirus (SARS-CoV-2) caught the medical community off-guard as it rapidly spread across the continents, unwarranted external political forces were also responsible, at least partly, for the astonishing damages by the COVID-19 pandemic in USA and India. Historically, USA has always played a leading role for protection against major epidemics or pandemics in the world. The Center for Disease Control (CDC) and Food and Drug Administration (FDA) in USA were also considered as the “gold standard” around the world in combat against novel diseases and use of new drugs or vaccines. But perhaps for the first time in medical history, both CDC and FDA cast a poor and dubious figure during the COVID-19 pandemic in 2020 as under external political pressure, these age-old medical institutions started to adopt irrational and often unscientific positions in regard to the actual danger and prevention of SARS-CoV-2 infection.

Early during the COVID-19 pandemic, then USA president, Donald Trump, outright rejected any notion that there was any chance for rapid spread of the new coronavirus. On live television very early during the COVID-19 pandemic, Mr. Trump categorically declared that nobody needs to worry about COVID-19 as it is just like the common

“cold” virus. Mr. Trump made even more outlandish claims that household “bleach” may be injected into human body to get rid of the COVID-19 infection and that anti-malarial drug Hydroxychloroquine (HCQ) could be used to prevent or cure COVID-19 as the top CDC and FDA medical leaders stood speechless next to the president. In fact, the bogus claim by the USA president prompted gross abuse of the HCQ by millions of ordinary people across the globe with the belief to prevent COVID-19 and FDA even granted an emergency use authorization (EUA) for use of HCQ in COVID-19 patients which was revoked later¹¹. Mr. Trump also openly challenged the role of any vaccine against COVID-19 and as a result of such widespread anti-vaccine political propagandas, a recent study found that 1 in 4 Americans are not willing to take COVID-19 vaccine under any condition¹². A report from the *Lancet* Commissions on public policy and health published earlier this year made an astonishing conclusion that Trump not only helped to expedite spread of COVID-19 in USA, he has also brought misfortune for the coronavirus pandemic to rest of the planet¹³. Although COVID-19 situation in USA has improved significantly with massive vaccination program and large-scale policy changes for COVID-19 by the new government, the damages done to public trust and credibility of CDC and FDA during 2020 may take a long time to heal.

The gross mismanagement in handling the COVID-19 pandemic in India mimicked USA in many ways as healthcare policies were frequently framed based not only on science but also by pressure from the

powerful political leaders. But unlike in USA, corruption has been closely associated with the medical system in India long before the advent of the novel SARS-CoV-2 virus¹⁴. Public trust on doctors in India has long been at an abysmally low level as widespread healthcare corruption was frequently blamed for the declining doctor-patient relationship^{15,16}. There are hardly any checks and balances for doctors and hospitals in India as victims of medical negligence frequently take to the street in demand for justice¹⁷. And with an ever-increasing demand for medical services for the 1.4 billion people and deeply flawed health regulatory system with little or no supervision for the mushrooming private hospitals across India, it is hardly surprising to find massive medical pandemonium in India as the coronavirus pandemic continues to ravage the country as COVID-19 victims are compelled to go through not only excruciating physical torments but also extreme financial agonies as private hospitals and laboratories make hefty profits in absence of any meaningful regulation over the cost of treatment for COVID-19 patients.

Earlier in 2021, Indian government publicly declared a premature victory over COVID-19 and announced that the country is in the “end stage” of the pandemic giving a false sense of hope for the millions of vulnerable citizens. Indian government also lifted most scientific prohibitions imposed to control spread of the COVID-19 only to find the entire country gripped by a colossal COVID-19 “second wave” only a few weeks later resulting in an unprecedented human tragedy and death in India¹⁰. The Indian Council of Medical

Research (ICMR), top governmental agency responsible for control of new COVID-19, simply ignored the scientific evidence as no warning was issued for a possible “second wave” as large number of COVID-19 patients overwhelmed the entire healthcare system as countless people died merely from inadequate oxygen supply or lack of basic medicines in hospitals. In order to maintain a positive image for tackling COVID-19 pandemic, Indian authorities also downplayed the severity of the “second wave” and declared highly deflated numbers of COVID-19 deaths even as horrific pictures of dead bodies floating in the river were projected on TV. Even many crematoriums ran out of burning woods and poor families of COVID-19 victims dumped bodies of their loved ones in the Hindu holy river *Ganges*^{10,18}. People in India are still very fearful about the ongoing COVID-19 pandemic and confused with the misleading information frequently coming from the healthcare authorities. India’s vaccination plan has also faltered with poor production and distribution of COVID-19 vaccine as well as public hesitancy to take vaccine due to an ill-informed society¹⁹. The ongoing healthcare turmoil and ominous intrusion of external forces into the medical science have raised an important question whether India’s COVID-19 emergency be fixed without politics²⁰? Perhaps an even more important, question -what could be the long-term effects in public trust on the medical profession as a result of the widespread use of misinformation and disinformation about COVID-19 pandemic used by the healthcare authorities in India?

D. Integrity of the medical fraternity and public trust

Studies have indicated that both satisfaction with the medical care received from your doctor and integrity of physicians as a group may play crucial role for building public trust on the medical profession²¹. In the era of the Internet and with rapidly spreading public awareness about the pros and cons in social medicine, universal healthcare and private medical system, leaders of the medical profession must assume an increasingly responsible role in making healthcare policies for patient managements and toward building a stronger doctor-patient relationship. Although USA has long been a leader in the progress of medical science, public trust in healthcare leaders of medical profession in USA has declined sharply over the past decades with only 34% of the patients expressed great confidence in the leaders of the medical profession in 2012 compared to 73% who expressed similar views in 1966. In fact, USA ranked near the bottom in public trust level among 29 industrialized nations even though individual patients' satisfaction with his/her personal doctor remained high underscoring that public perception of medical community leaders may play a decisive role for building trust on doctors²¹. Unfortunately, public trust on doctors and healthcare regulators has long been eroded in India where doctors are frequently involved with gross unethical activities, like receiving financial "kickback" for referring a patient¹⁵. The root cause for such deplorable condition of the medical profession in India is that doctor-only members in the top healthcare regulatory

authorities like the Medical Council of India (MCI) routinely work primarily to shield their errant medical colleagues without caring for the truth or loss of public trust in the medical profession^{15, 22}. In contrast, medical communities in USA and other developed countries have generally maintained high ethical standard as they are not reluctant to take necessary disciplinary action against the errant medicos and as such, they have generally enjoyed a high level of public trust. Unfortunately, public trust on doctors and healthcare workers may erode significantly in USA following the medical chaos and gross mismanagement of the COVID-19 pandemic in 2020.

E. Doctor-patient relationship in the post-COVID world

Trust is the cardinal element for building interpersonal relationship and especially for relationship between doctors and patients which may be linked literally to question of life and death. Undesirable changes in the healthcare system, especially under the influence from extraneous political forces, are likely to sow the seed of distrust in the society against the medical profession at large. Even prior to the COVID-19 pandemic, physicians' behavior and vested financial interest were found to be closely associated with patients' trust on doctors²³. Recent selection of a corrupt and criminally indicted doctor from India as the president of World Medical Association (WMA) brought great ignominy for the world medical community that fed to the growing public distrust toward the medical profession across the globe²⁴. With the development of highly

effective vaccines and rapid progress in vaccination against COVID-19, in countries around the world, it is expected that the nightmare of the global COVID-19 pandemic may come to an end sometime in the near future. But the acute fear and trauma inflicted on the society at large by the unprecedented global pandemic may have lasting impact on patients' trust and doctor-patient relationship for the future.

While part of the intense pain and suffering due to the COVID-19 pandemic perhaps was inexorable due to the inherent virulence and highly contagious nature of the SARS-CoV-2 virus, poor governmental planning coupled with outrageous political invasion of medical science were also responsible for the massive human casualties from COVID-19. USA and India with the highest numbers of COVID-19 infection and death (apart from Brazil) perhaps are the two worst examples of the baleful political influence resulting in palpable medical calamities during the COVID-19 pandemic. Shocking pictures on live television showing a sitting USA president, surrounded by host of speechless and dumbfounded top medical leaders from CDC and FDA, declaring that "bleach" may be injected into human body to kill SARS-CoV-2 virus or that anti-malarial HCQ may work as like "magic" to cure COVID-19 were seen by millions of ordinary people around the globe¹³. Equally astounding pictures from India showing scores of human dead bodies floating in the river and large number of COVID-19 patients perishing solely due to lack of oxygen supply even after the top government doctors and healthcare authorities had already declared victory over

the pandemic must have sent a chilling signal to the society at large which is likely to undermine public confidence and trust on the entire healthcare delivery system in the future¹⁰.

In contrast to the shameful display of character by the medical leaders in USA and India during the COVID-19 pandemic, other side of this story painted a picture of tremendous sacrifice made by countless doctors and healthcare workers across the globe who worked tirelessly, taking risks to their own lives at times, solely for the sake of humanity and to protect and save the ailing COVID-19 patients. Many doctors and nurses also contracted COVID-19 and eventually died while serving the community ravaged by the pandemic. The selfless sacrifices made by healthcare workers during the COVID-19 pandemic were aptly highlighted by the media and reported in the medical journals²⁵. The goodwill earned by the doctors and nurses who served the community during the COVID-19 pandemic would undoubtedly be helpful to uplift the sagging public image of the medical profession.

What effects of the COVID-19 pandemic may linger in the society for the medical profession in a post-COVID world may be difficult to envisage at this present juncture. Some have predicted that general practice of medicine may change forever in the post-COVID universe with widespread use of remote medical consultancy and monitoring of patients through the video technology with less medical bureaucracy and fewer face-to-face interactions between the doctor and his

patient²⁶. The positive images of healthcare workers taking risks to their own lives only to protect the vulnerable communities terrified from a rampaging COVID-19 pandemic are also likely to instill more public confidence and respect for our healers. Undoubtedly, this may help to build a stronger and enduring doctor-patient relationship in the future. On the other hand, the memories of gross misrepresentation of scientific evidence about COVID-19 pandemic and total capitulation of top doctors in the highest medical institutions under pressure from the unscrupulous political leaders to promote baseless medical claims would likely cause severe damage to public trust on the medical profession in the future. Never before in medical history, direct intrusion of the healthcare system by politics has caused so much destruction of humanity and inflicted so much damage to public trust on medical profession as we witnessed during the COVID-19 pandemic, particularly in USA and India. While good, bad and the ugly in our healthcare system were fully exposed during the COVID-19 pandemic, the onus will be on the members of the medical profession to learn from our mistakes during the pandemic and to stand firm always against all forms medical misinformation and junk science without fear of any political or medical retribution if we intend to restore public trust and build a robust doctor-patient relationship in the post-COVID world.

F. Conclusion

COVID-19 pandemic has brought many unprecedented and radical changes in the

mode of general practice of medicine and doctor-patient interactions that healthcare workers were used to until now. Over the past more than one and a half years during the course of the ongoing COVID-19 pandemic, both doctors and patients got used to consultation remotely through videoconferencing using Zoom or other online platforms. Even during physical visit in hospital, face-to-face meeting with doctor is done from behind the barriers of mask and PPE in a less personal and emotional environment than before. How the enhanced physical and emotional distance between doctor and patient may in future affect doctor-patient relationship remains to be seen.

A more important aspect of the COVID-19 pandemic that may have a long-term detrimental effect in doctor-patient relationship has been the unprecedented political intrusion of medical scientific community that has badly damaged public confidence on the medical profession. Political destruction of medical science during the COVID-19 pandemic was most evident in USA and India, two largest democratic nations in the world. People around the globe have witnessed with horror in live television as the sitting USA president, Donald Trump, made absolutely baseless claims that COVID-19 is a hoax or that cleaning bleach may be injected to COVID-19 patients to get rid of the virus or that anti-malarial drug Hydroxychloroquine may actually cure COVID-19 as top medical leaders from CDC and FDA stood next to the president speechless and did not utter a word against the voodoo medical claims. Similar

pictures also emerged in India where countless people were dying from COVID-19 while Indian authorities started to claim victory over the pandemic. Members of the medical community who succumbed to the political pressure and helped to spread false information about COVID-19 have done a great disservice to the entire medical profession that will undoubtedly have a long-term deleterious effect on public trust on doctors.

In contrast to the deplorable role played by some medical leaders who wilted under political pressure and spread misinformation about COVID-19, many other doctors helped to paint a positive picture for the medical community as they made tremendous sacrifice and stepped forward to treat and protect the vulnerable COVID-19 patients taking risk to their own lives. Although the unprecedented experiences, good, bad and the ugly, gathered during the COVID-19 pandemic is likely to have significant impact on public trust in the medical profession for the future, it is unclear how doctor-patient relationship would be affected in the post-COVID world. But at this juncture with threats of COVID-19 pandemic still gripping

many parts of the world, the onus is on our healers to stand firm and raise strong voices against any attempts to subvert medical science or spread misinformation about COVID-19 by anybody including the head of the state.

Competing interests: Author is the founding-president of "People for Better Treatment" (PBT), a national charitable organization (NGO) in India dedicated to promotion of better healthcare and medical education system in India. PBT is also involved in legal battles (public interest litigations; PILs) against Indian Council of Medical Research (ICMR) and Indian health ministry on the use of unapproved drugs against COVID-19 and other failures during COVID-19 pandemic.

Acknowledgement: The author acknowledges and thanks Mr. Dinesh C. Sharma, science journalist and commentator, for his careful review of the manuscript and comments. The author also thank executive committee members of "People for Better Treatment" (PBT) for their helpful suggestions and comments.

References:

1. Emanuel EJ, Emanuel LL. Four models of the physician-patient relationship. *JAMA* 1992(16); 267: 2221-2226.
2. Anderson LA, Dedrick RF. Development of the trust in physician scale: a measure to assess interpersonal trust in patient-physician relationships. *Psychol Red.* 1990; 67: 1091-1100.
3. Mechanic D. The functions and limitations of trust in the provision of medical care. *J Health Polit Policy Law.* 1998; 23: 661-686.
4. Pearson SD, Raeke, LH. Patients' trust in physicians: Many theories, few measures and little data. *J. Gen. Intern. Med.* 2000; 15: 509-513.
5. Simons J, Vaughan, J. Sacrifice and risk in the time of COVID-19. *Future Healthc J.* 2020; 7(2): 158-160.
6. Torres, N. Medical workers are sacrificing themselves to protect us. Here's how we can help them. *The Guardian*, October 9, 2020. Available from: <https://www.theguardian.com/commentisfree/2020/oct/09/frontline-medical-workers-coronavirus-support-congress> [Accessed May 23, 2021].
7. Wiersinga WJ, Rhodes A, Cheng AC et al. Pathophysiology, diagnosis, transmission and treatment of coronavirus disease 2019 (COVID-19). *JAMA* 2020; 324(8): 782-793.
8. COVID-19 pandemic numbers at a glance. *WHO*, May 24, 2021. Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019> [Accessed May 24, 2021].
9. US COVID-19 case average falls below 30,000. *Wall Street Journal*, May 21, 2021. Available from: <https://www.wsj.com/livecoverage/covid-2021-05-21> [Accessed May 24, 2021].
10. India's COVID-19 emergency (Editorial). *Lancet* 2021; 397:1683.
11. FDA revokes emergency use authorization for chloroquine and hydroxychloroquine. *FDA Press Announcement* 2020. Available from: <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-revokes-emergency-use-authorization-chloroquine-and> [Accessed May 22, 2021].
12. Vaccine refusal may put herd immunity at risk, researchers warn. *NPR Health News*, April 7, 2021. Available from: <https://www.npr.org/sections/health-shots/2021/04/07/984697573/vaccine-refusal-may-put-herd-immunity-at-risk-researchers-warn> [Accessed May 24, 2021].
13. Public policy and health in the Trump era. *Lancet* 2021; 397: 705-753.

14. Pulla P. Medical Council of India is corrupt, says health minister. *BMJ* 2014; 349: g4762.
15. Berger D. Corruption ruins the doctor-patient relationship in India. *BMJ* 2014; 348: g3169.
16. Sachan D. Tackling corruption in Indian medicine. *Lancet* 2013; 382: e23-24.
17. Chaudhuri M. Families demand reform of India's medical negligence system. *BMJ* 2014; 348: g183.
18. India COVID: Delhi hospitals plead for oxygen as more patients die. *BBC News*, May 2, 2021. Available from: <https://www.bbc.com/news/world-asia-india-56940595> [accessed May 22, 2021]
19. Why is world's largest COVID-19 vaccine campaign faltering? *Science Magazine*, May 19, 2021; Available from: <https://www.sciencemag.org/news/2021/05/why-world-s-largest-covid-19-vaccine-campaign-faltering> [accessed May 24, 2021].
20. Saha, K. Can India's COVID-19 emergency be fixed without politics. *Lancet* 2021; 397: 2465.
21. Blendon RJ, Benson JM, Hero JO. Public trust in physicians – U.S. medicine in international perspective. *NEJM* 2014; 371: 1570-1572.
22. Ken S, Kalnan M. Erosion of trust in the medical profession in India: Time for doctors to act. *Int. J Health Pol. Manag.* 2017; 6(1): 5-8.
23. Kao AC, Green DC, Zaslavsky AM et al. The relationship between method of physician payment and patient trust. *JAMA* 1998; 280(19): 1708-1714.
24. Pandya S, Nagral S, Nundy S. World Medical Association's tainted president, Ketan Desai. *BMJ* 2016; 355: i5867.
25. Johnson SB, Butcher F. Doctors during the COVID pandemic: What are their duties and what is owed to them. *J Med Ethics* 2021; 47: 12-15.
26. Looi MK, Coombes R. Risky business: Lessons from COVID-19. *BMJ* 2020; 369: m2221.