

COVID-19 pandemic and safety of taxi services: Looking beyond primary care

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ABSTRACT

The COVID-19 pandemic is a lifetime experience of 'Living within a pandemic' for the vast majority world over. Public health principles based on equity should be at the core of world's response to it. Service professionals such as taxi/cab drivers are no exception. It is a challenge for them to establish mechanisms for making taxi services safer with regards to SARS COV2 spread, and thereby regain the confidence of stakeholders in this necessary public service. This requires a comprehensive planning taking into account the socio-economic stresses, psychosomatic health and other determinants, and yet being able to adapt and innovate for safer services. These considerations and decisions have to be based on available as well as emerging research evidence about this infection both in the lab and in the community. Targeted safety interventions that translate and apply research findings hold promise. While the course of the pandemic remains uncertain, life must find a 'new normal' and people need to get back to the business of regular living. The purpose of this review is to study the various risks to the stakeholders in taxi/cab services, and draft strategies for mitigating these risks from a theoretical and practical perspective.

Keywords: COVID-19, driver, health, social distancing, taxi, well-being

Introduction

The world has been in the grips of the Coronavirus Disease 2019 (COVID-19) pandemic for almost a year now. It is a manifestation of the infection with the Severe Acute Respiratory Virus-2 (SARS-CoV2). The impact and future course of the pandemic cannot be adequately predicted due to a lack of full understanding of the natural history of disease. Even though this infection has caused similar devastation in the affluent countries and in the Low and Middle-income Countries (LMIC),

it has further exposed the discrepancies in health conditions and public health response based on race and societal hierarchy of communities.^[1] The epidemiologists are of the opinion that comprehensive mass protection healthcare measures are perhaps the most effective strategy for combatting this pandemic, simultaneously ensuring social justice.^[2] However with passing time, it has become clear that it is essential to resume regular day to day activities for economic, psychosocial and mental wellbeing of people, communities and nations. This resumption of routine order of living has to be established with a 'new normal' way of doing things so as to avoid further spread of COVID-19.

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The Taxi/Cab Services

The taxi/cab service is a near-essential service that has been severely affected as a result of the pandemic. It is well known that

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mobility of the population and mass transportation are closely linked with the transmission of infectious diseases in addition to the demographic, behavioural, socio-economic and cultural determinants.^[3] With public transport carrying a higher risk of infection spread, the need as well as burden on taxi services is only expected to increase. More important, the taxi/cab drivers are at a higher risk of getting infected by the mere nature of their job that may include carrying passengers who may be affected or even may be a healthcare worker.^[4,5] And they cannot afford not to work for reasons of sustenance. This places them under significant economic as well as mental stress. Therefore, globally there is an effort towards enforcing mandatory safety measures and checks in the mass transports and cabs.^[6,7] The present review was undertaken with a purpose of understanding the COVID related risks faced by the taxi drivers, and to propose feasible strategies for mitigating the risk of spread of COVID-19 so that people may feel safe travelling in taxis.

Brief Overview of Coronavirus Disease 2019 (COVID-19)

The understanding of COVID-19 is still evolving with time. Initially believed to be an influenza like illness with chiefly respiratory system involvement, it was soon realized that SARS-COV2 infection has significant effect on multiple organ systems including the heart, kidneys, brain and has an unpredictable course. The elderly population is at a higher risk of contracting the infection with subsequently elevated mortality and disability. Even among the young, those with co-morbidities and underlying immuno-compromised conditions have a higher susceptibility.^[7,8] The spread of the SARS-COV2 occurs mainly by aerosol (such as during talking, coughing, sneezing, laughing) and contact (such as by fomites e.g., door handles, surfaces). Hence, the advisory for keeping a person-to-person distance of at least 2 meters and use of face masks of various kinds depending on the area. Despite all measures, infection may still spread specially in public places and among the susceptible population.^[9] There is also some evidence that infection spread may be air borne which would imply mandatory use of masks even at home.

Clinical Characteristics

Presenting symptoms

People infected with SARS-CoV-2 may remain asymptomatic carrier or present with a range of mild to severe life-threatening symptoms. The symptoms of COVID-19 may appear 2-14 days after exposure to the SARS-CoV-2 virus. The commonest symptoms mimic that of 'common flu'. These are: fever, dry cough, body ache, headache, sore throat, nasal congestion. A more severe presentation could be breathlessness, chest discomfort, etc., Recent onset loss of taste or smell have also been observed.

Worsening of disease

The worsening or deterioration may happen suddenly in this disease. 'Happy Hypoxia' is a term often encountered in this

reference.^[10,11] The affected person may remain surprisingly normal even with low oxygen saturation, until it reveals itself in the form of sudden collapse or sudden worsening of dyspnoea. This has a practical implication in the form of use of small readily available devices called the 'Pulse oximeters'. They can be useful for screening, as well for monitoring people in home isolation.

Multisystem involvement

Severe form of disease with lung involvement in the form of Adult Respiratory Distress Syndrome (ARDS), involvement of other organ systems such as the heart, brain and kidneys may occur. A phenomenon known as the 'cytokine storm' and embolism of microthrombi become life threatening.

Challenges

It is the asymptomatic carriers that pose highest risk of spreading the disease, and any preventive and safety strategies have to be devised based on the presumption that any person using the taxi service may be infected. Only then will the universal adoption of these measures by taxi services will be effective and reassuring. Some of these strategies are discussed as below:

Clear guidelines for clients and drivers

The prevention of transmission of covid-19 has to be a combined effort by the service providers of transport facility, and the users or the clients. Preparation of a 'Citizens charter' on priority basis for individual safety is the first task at hand. This must contain in clear terms and in local languages, the strict rules and regulations of safety practices for the passengers. It should be updated on a regular basis as and when new information is available or when there is a change in policy by the Government or regulatory body. Separate guidelines must be issued to the service providers and drivers.

Safety Practices by the Drivers for Self-protection

The drivers must first ensure their own protection in the form of use of mask, frequent hand washing with soap and water for at least 20 seconds. Use of alcohol-based hand sanitizer with at least 60 percent alcohol content is suggested if soap and/or water are not available in public places. Drivers should wear quality certified face mask of prescribed specifications. The use has to be consistent throughout the shift with care to avoid touching face, eyes, nose or mouth without washing hands; avoiding close contact with sick people; covering mouth and nose with a tissue while coughing and/or sneezing, and then properly disposing the tissue followed by immediate hand wash. Use of cashless and touchless payment modalities to be maximised. It is also advisable to use gloves for collecting cash payments. They must preferably drive with windows open.

Practices for passengers' protection

There should be printed information for passengers pasted in front and sides of back seat for public education preferably in

vernacular. Tissues and hand sanitizer should be made freely available for all passengers. Further, there is need to ensure compulsory usage of masks by the passengers irrespective of age and gender before boarding the vehicle and ask them to take rear seats only, to ensure physical distancing. Passengers must use only the rear seats and must preferably handle own luggage.

Care and cleaning of the vehicle for preventing transmission

Common touch surfaces' well-sanitised before and after each trip/finishing driving using alcoholic wipes (60% minimum) or disinfectant wipes specially after trip with symptomatic passengers. The air conditioner may be used preferably on the fresh air/recirculation mode. A plastic sheet or plexiglass partition must be preferably placed between the driver's seat and the rear passenger seat.^[12,13]

Precautions at rest stops and taxi stands

The drivers must strictly maintain 'social' distance of minimum two metres, use standard quality face mask and avoid handshake; never ever share/exchange personal protective equipment (PPE); practice correct hand hygiene by hand washing as many times as possible. It is advisable to carry own food or make self-arrangements of takeaway foods and drinks.

How must drivers handle exposure to disease?

Drivers are often at a higher risk of infection from passengers, rest-stop attendants, workers, peer drivers and fomites. They come in contact with multiple people all through the day and sometimes for prolonged period of times. Drivers should notify supervisor immediately and stay home, if they have symptoms suggestive of COVID-19. The driver in contact with suspected COVID-19, needs to go for self-quarantine period of 14 days. This advice is mandatory to follow even if he/she remains asymptomatic and recovers uneventful. If the symptoms re-appear or worsen during home isolation at any point of time, they should contact healthcare facility nearby as mentioned above.^[5] If a passenger is unwell before, during or after a journey or the passengers who have the symptoms suggestive of COVID-19 disease should be counselled regarding the clinical features, persuaded to go back home due to the symptoms noted empirically and suggested to get evaluated for the SARS COV-2 infection. They should follow the stipulated guidelines to urgently report to a designated health care facility for guidance on medical attention and intervention.^[5]

Mitigation Efforts by the Government

The government and public health authorities can take initiatives for making these services safer and more secure from Covid-19 perspective. Regulatory mandate improves the compliance of advisories. The Government of Haryana issued guidelines regarding taxi, cab aggregators, maxi cab and auto rickshaw drivers to ease public transport system such as limiting the permissible number of passengers to two in these vehicles, making it mandatory to wear masks and gloves, regular

sanitization of vehicles, and strictly regulated movements in containment zones.^[14] Directives to install Aarogya Setu app on phones was another effort by the government. Persons above the age of 65 years, those with co-morbidities, pregnant women and children below 10 years of age have been advised to stay at home except for emergency.^[14] Social distancing, practice of personal sanitisation must be promoted at all taxi or auto stands.^[14]

Other Support Options and Mechanisms

- Optimize behaviour change communication as much as possible with regular updating following public policy advocacy – do's and do not's.
- Standard Operating Procedure (SOP) must be drafted and provided to all taxi drivers (also as digital copy). It must contain step by step procedure to followed, and also the checklists to make sure that SOP has been adhered to. Drivers can be handed a standard checklist that must be filled by every passenger using the service. This would include the name and contact details and a self-declaration of key symptoms or absence thereof.
- Designate and announce dedicated 24 × 7 liaison personnel or toll-free hotline to respond on driver's concern regarding where to halt, where and how to contact for medical care, and freight delivery.
- Leave rules and supportive policies and practices, including fatigue management strategies, should have a 'human face' in mind instead of 'Management by objective' with importance on self-reporting by employee and maintain strict confidentiality. Elderly drivers and with co-morbidities should be taken care with stipulations of public policy; additional precautions needed for ride-along or team driving on a long-haul run (c.f. separators).^[8]
- Liaison with local public health officials is essential for updating on local outbreak, change in policy and smooth running of services.^[8]
- Training of drivers in safety measures and use of PPE: The government run regulatory authorities as well Non-government welfare associations must arrange for training sessions for drivers and owners of taxi agencies so as to train them in safety precautions, specific protective measures, allay their fears, address their concerns, and making their work environment safer.

Conclusion

Globally the profession of driving, as the part of service sector, has been accepted by everyone as the lifeline of growth and development during every generation. The impacts of the COVID-19 pandemic on professional drivers need to be optimally addressed as an additional stressor to the existing health and safety issues of the profession. There is a promising hope of a 'new normal' in taxi services, and commute for work provided the system and the stakeholders are willing to adapt to the challenges, adopt the measures as per advisors and guidelines, learn from the experiences of other states and countries, and

follow the motto of “Safety First” as well ‘I protect you & you protect me’. To mitigate and minimize all the short, medium and long-term impacts, exhaustive research and prevention efforts must be conceptualized and contextualized. There is a need for ‘systems approach’ to save the lifeline of communication by mitigating driver’s health. There is urgent need to model the COVID-19 pandemic as an occupational health hazard of drivers with particular stress on the stress on the mental health over time.

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Conflicts of interest

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