

RISKS OF COMMUTING BY PUBLIC TRANSPORT DURING PANDEMIC OUTBREAK IN BENGALURU

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Abstract- Bengaluru Metropolitan Transport Corporation (BMTC) buses and Namma Metro railways play a very important role in daily commuting. Many commuters commute to work places, offices, factories, market, schools, colleges and different places for their everyday needs. These public transports is one of the most chosen means of transport as it is cheapest and easily available means of transport. Commuters face health risks while travelling as they are likely of getting exposed to contagious diseases other than stress, anxiety, injury and air pollution. Infected commuters having contagious cold, cough, influenza tuberculosis are seen every day, But during bacterial and viral pandemic diseases travelling daily without any proper precautions is highly risky. There is highest risks of spreading pandemic disease among commuters during COVID-19 outbreak and it may occur due to lack of social distancing as the buses will be full more than its capacity during peak hours, not using masks and gloves by commuters and no proper screening by the authorities and without sanitization of seats and insides of buses and trains. The commuters, drivers and conductors already infected should take precautionary measures and not infect other healthy commuters those who are travelling by public transport.

Index Terms- Pandemic Disease, Public Transport, Commuters, Bengaluru.

I. INTRODUCTION

Public transport like Bengaluru Metropolitan Transport Corporation (BMTC) buses and Namma Metro railways are very important as many commuters depend on it for commuting to college, schools, markets, work places, hospitals or any other basic needs as it is easiest, commonly used, cost effective, feasible, reduces traffic congestion, fuel efficient and safe means of travel. Many commuters reside in different places of Bengaluru city far or near

commute in public transport and while commuting they are been exposed to different types of ill health effects. Sometimes the buses and railways will not be available according to their preferred timings and they have to wait for longer time in the bus stands leading to stress, anxiety and chance of exposing to virus is predominant, Metro railways are fast means of travel so people prefer these so that they can reach their destination quickly while doing so, lot of commuters gather and infection is likely. When the buses and trains are available in the peak hour there will be heavy rush in the bus and trains leading to increased risk of exposure to contagious diseases. It is known that the public transport like buses are less comfortable, less reliable and yet their services are used frequently (Ayanda Vilakazi and Krishna Gounder, 2014). It is been seen that commuters select the public transport based on the arrival time at the station and they can use it (Guillaume Monchambert and Andre De Palma, 2014). So the study was done to find the possible ill effects of travelling in public transport during pandemic.

II. METHODS

As soon as Karnataka government announced the relaxation for BMTC buses, many commuters started commuting and there is increase in commuters from day one to next. Observations done based on the behaviour and movement of the public commuters, it is been observed many commuters are not maintaining social distancing, strict use of masks and no screening done while waiting for bus in stops nor inside the buses which may lead to pandemic spread. The same problem arises when Metro trains are relaxed for running. The public commuting by public

transport should take necessary steps not to get infected or spread the pandemic diseases.

III. DISCUSSIONS AND CONCLUSIONS

The various possible risks for exposure to various ill health effects for the commuters might be due to longer distance travelling exposed to infected commuters, crowded public transport as there will be no distance maintaining, due to overcrowding of bus or trains. The symptomatic commuters may infect healthy commuters by coughing, sneezing, spitting, vomiting during which lot of viruses are released from infected person which lead to infection of healthy people and asymptomatic infected commuters are more dangerous as do not show any symptoms and infect many people and spread to families and the whole area and increase the chain of infection. Infected Commuters, drivers, conductors and authorized people will spread infections when healthy commuters do not wear masks and gloves, not maintain social/physical distancing and not wash their hands and exposed body parts with soaps and sanitizers. It is noted that one person spreads COVID -19 to nine persons and there is high risks of community spread of virus in buses (Arvind Hari Kumar 2020). The sanitization of buses and trains should be done every time. The public should not share cell phones and eatables during travelling. After commuting the commuters should and must wash their exposed body with clean soap and water and sanitizers and maintain social distancing and wear masks during travelling and before joining the family take precautionary measures by washing the exposed clothes. If they are buying and carrying anything from markets try to throw the plastic or paper coverings in bins and keep the things outside for some time if they are not using immediately.

It is duty of every Bengaluru citizens to keep the buses and trains clean, no misbehavior in the public buses and trains, and avoid spreading contagious disease to others. maintain health and hygiene in the public places, trains and buses. Proper screening of the commuters while boarding the buses and trains. Maintaining of limited number of commuters in buses and trains. Union health ministry and ICMR has asked and appealed all states to prohibit the use and spitting of smokeless tobacco, paan masala , areca nut in public places (Economic times., 2020).

The experts say vaccine for corona virus may still be a year away and may take long time its better to stay at home which help in slow spread of the virus (Travis Pitman.,2020). Which is not possible normally because many people go out for work and lead their new normal life. It is been noted some people are excited and move to new normal and many are concerned with physical health and changes in the society after lockdown (Amy Morin.,2020).The BMTC buses and Namma Metro trains are very much beneficial for the commuters as they provide concession for community for travelling, they provide pooling and reduce congestion of traffic. It is very important that BMTC and Namma Metro should increase the number of buses and trains during peak hours so that commuters can use efficiently during COVID -19 pandemic, It is important that safety kits and screening must be done for conductors, drivers, guards and the authorities coming in contact with the public. Though pandemic disease cannot be cured quickly in populated city but safety measures and immune boosting can be done and stay safe and at the same time herd immunity happens when so many people in a community become immune to infectious disease that it stops the disease from spreading (Healthline., April 2nd 2020) and it happens when people have built in natural immunity or vaccinated against the viruses which leads to not spreading of disease to others. Studies shows that staffs and nurses working in Jayadeva Institute of Cardiovascular Sciences and Research (SJICSR) have developed herd immunity to COVID 19 and they were commuting to work every day during lockdown also would have been exposed to viruses while commuting and this was proved by testing with IgG ELISA test (Times of India, 2020).

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