

Community Transmission of Covid-19 and the Challenges of Curbing it spread in the Rural Settlement: A Review

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Abstract:- Infectious diseases have detrimental effect on healthy living. This paper on the community transmission of Covid-19 and the challenges of curbing it spread in the rural settlement examines some factors that facilitate the spread of Covid-19 in rural communities and the potential approaches to reduce the spread of the virus. These factors include; fear and obstruction of health system, low health literacy, social and cultural practices, absence of basic health infrastructure and personnel, cultural and religious belief as well as poverty. Improvement of health care facilities, proper public awareness of the virus, transparent distribution of government palliatives and the involvement of the traditional and religious leaders will greatly help in the management of the spread of the virus.

I. INTRODUCTION

The main instance of the novel coronavirus first showed up in Wuhan, China toward the finish of the year 2019, when a group of patients with pneumonia of obscure reason was connected to a nearby Huanan South China Seafood Market in Wuhan, Hubei Province, China [1]. While China put forth a valiant effort to contain the spread of the infection with uncommon lockdowns, the infection figured out how to wriggle its way to the whole world [2].

The coronavirus has a place with a group of viruses that may cause different manifestations, for example, pneumonia, fever, breathing trouble, and lung disease [3]. Coronaviruses are known to infect different animals around the world, yet not very many have been known to infect humans. There are four genera of CoVs: (I) α -coronavirus (alphaCoV), (II) β -coronavirus (betaCoV) presumably present in bats and rodents, while (III) δ -coronavirus (deltaCoV), and (IV) γ -coronavirus (gammaCoV) likely infect the avian species [4, 5, 6]. Note that it isn't the first occasion when that the coronavirus is causing an epidemic that has been a critical worldwide health threat: in November 2019, an episode of coronaviruses (CoVs) with serious intense respiratory conditions -severe acute respiratory syndrome (SARS)- CoV began in the Chinese territory of Guangdong and once more, in September 2012 the Middle East respiratory syndrome (MERS)-CoV showed up [7].

The World Health Organization has declared that the official name of the 2019 novel coronavirus will be coronavirus disease 2019 (COVID-19) and its reference name is Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) [2]. They proclaimed it a pandemic on the 11th March, 2020, which implies that the infection has gotten a worldwide plague and is spreading quickly [8].

COVID-19 is a RNA virus, with a crown-like appearance under an electron microscope because of the nearness of glycoprotein spikes on its envelope [3]. The infection has a characteristic and zoonotic source, since coronaviruses make up a huge group of viruses that can contaminate birds and mammals, including humans [8]. The virus can be transmitted a few distinct ways from individual to individual contact and from respiratory droplets created when an infected individual coughs or sneezes. It can likewise spread if an individual comes in contact with a surface that is contaminated with the virus and afterward touches their own mouth, nose, or conceivably their eyes [9]. Evidence shows that there are a few individuals who have the highest susceptibility to complications due to Covid-19. These incorporate newborn children, old people, individuals with underlying illnesses and patients with compromised immunity [10].

The spread of the virus has been arranged in various stages, these incorporate (1) Imported cases, when all the affirmed cases have a travel history of going to nations with instances of Covid-19. (2) Local transmission, when the infection is transmitted from imported cases case to individuals they interacted with. (3) Community transmission, when the wellspring of transmission can't be followed for a lion's share of cases. The affirmed cases in this stage neither have travel history to affected nations nor have they interacted any infected patients, and (4) Epidemic, when the illness appears as a plague, the transmission gets totally out of control and the infection has no unmistakable end.

Currently, there is no cure for Covid-19, thus, distinct measures have been set up to decrease its spread these include; social gathering deprivation (weddings, viewing centers, entertainment programs, academic and business conferences etc.), closure of schools, business, and religious centers or gatherings, lockdowns, stoppage of

international and inter-state travel, curfews, wearing facemasks, utilizing hand sanitizers and regular hand-washing to lessen the spread of this infection. However, these preventive measures though are working in most of the urban settlements; they are not enforced and followed in the rural areas due to some challenges. Subsequently, this paper aimed at giving an overview on community transmission of Covid-19 and the difficulties of controlling its spread in rural areas and recommend possible solutions to the challenges.

II. COMMUNITY TRANSMISSION

During the underlying period of the spread of the infection, the infected individuals had travel history to affected nations and states or had interacted with individuals who had or are infected with the virus. Be that as it may, a portion of the new patients had no travel history or no obvious sign of interacting with infected people which have raised worry to health organizations and government bodies [11]. Since the Federal and state government lifted the lockdown and authorized a few measures to decreasing its spread, community transmission may be dreaded in the country particularly in the rural zones.

Community transmission is said to occur when the wellspring of infection for countless cases in a zone can't be traced; when people get the disease without having made a trip to nations where the infection is circling or having been in contact with known infected cases. It is the point at which you get it from others - at work, out shopping, on open vehicle, yet you're getting it from individuals who likely don't think they have the disease. They may have no manifestation of the disease at all or very mild symptoms [12].

III. THE CHALLENGES OF CURBING THE SPREAD OF COVID-19 IN RURAL AREAS

Entering the phase of community transmission would imply that an enormous number of patients will be increasingly presented to the virus, more individuals should be tested, quarantined and treated. City authorities and health experts have taken serious activities like shutting of schools and organizations on the grounds that the infection would be difficult to control once it starts to spread from one individual to individual inside a community. These preventive estimates set up by the government have been working for the most part in the urban territories of the country which at that point puts the rural regions at more serious danger of viral spread because of certain challenges. These challenges incorporate;

➤ *Fear and Obstruction of Health System:*

This dread of this infection has prevented numerous people from looking for proper health care; rather they are hiding from specialists and going to conventional healers or relatives for care. Infected people previously admitted to isolation centers for care have likewise fled, fearing they will most beyond words eventually die. For instance,

during the Ugandan Ebola outbreak, individuals believed that once they are isolated, they could never see their families again [13]. This is additionally the situation with regards to Covid-19 where many may have the signs of the disease and don't border to proceed to look for medicinal services or report themselves to appropriate authority since they would prefer not to be separated and isolated. This will prompt additionally spread of the illness.

➤ *Low Health Literacy:*

Health education, or the capacity to comprehend and apply information to care about oneself, is a challenge for the roughly 1 out of 2 people living in the rural areas [14]. To extensively manage chronic conditions such as, Covid-19 on a daily basis, people must have the option to assess, comprehend, and use health information [15]. The information about the virus is obscure to numerous in the rural settlement, so understanding the management practices of the virus may resemble an exercise in futility to them there by expanding the spread of the virus.

➤ *Social and Cultural Practices:*

Considering conduct and culture in disease transmission is crucial to understanding transmission elements and control [16]. Cultural diversity shapes African countries and can affect social union and communication, especially during the times of disturbance. Covid-19, because of its means of transmission, is especially impacted by culture and behavioral practices like burial practices, involving washing and touching of the deceased, and the gathering of the people during the occasion can greatly influence the spread of the disease [13]. Also, due to accommodating nature of the African culture, individuals especially in the rural areas welcome their visitors who may have come from affected states with open arms, exchange pleasantries either by hugging or hand shaking without observing the measure of preventing contact and self isolation. This could largely lead to the spread of the virus.

➤ *Absence of Basic Health Infrastructure and Personnel:*

The health infrastructure in numerous rural regions is deficient even before the outbreak of Covid-19. The health care facilities there are not well equipped to test and deliver proper care for those that may be infected with the virus. Likewise, trained personnel to handle such a chronic disease is lacking in many of the facilities in the rural areas. In most rural settlements, fundamental medications don't contact individuals who need them, because of issues in financing, obtainment, management, and conveyance.

➤ *Poverty:*

While the virus infects people regardless of wealth and social status, the poor will be most affected. The measures to reduce the spread of the virus implemented by the government like closure of markets, stopping the use of tricycles and bikes, and others have affected many homes because their source of income has been stopped. Also, the palliatives promised by the government due to lack of transparency didn't get to most rural communities, possibly they get them, it is not enough. As a result, some of the individuals are unable to provide for their families, hence,

the saying “hunger virus kills faster than coronavirus” so they disregard the preventive measures and go and source for food. In addition, poor people hardly eat good food which results in malnutrition and weakened immune system which puts them in greater danger of getting the virus.

IV. PATH FORWARD

The various challenges featured are not difficult to handle; they must be tended to appropriately. In this way, the following are suggested;

- Appropriate protocols for conveying care ought to be structured and executed so as to forestall the spread of the virus.
- Health care facilities in the rural communities should be well equipped to counter this virus. Trained personnel should be sent to the communities to give proper orientation to health personnel in the rural communities on how to tackle the virus.
- The private sectors of the nation often has private healthcare facilities and could assume a significant role in growing access to treatment in the rural regions.
- The significance of interpreting the concept of health literacy to the rural communities can possibly fill a hole in the comprehension of the connection between health education and disease management. This interpretation can be done in local dialects to ease understanding of the causes, prevention and management of the disease. This comprehension would encourage the advancement of health literacy and diminish the spread of the virus.
- Traditional rulers and religious leaders have an extraordinary task to carry out in the management of this infection. They order a great deal of respect from the individuals particularly in the rural setting. They can cooperate with government and non government bodies in clarifying the significance of the preventive measures to the individuals in their communities, so the spread can be reduced and halted.
- The distribution of government palliatives should be transparently done so as to get to the vulnerable in the communities.

V. CONCLUSION

Covid-19 is real and the infected cases are on the rise globally. The virus infects anyone regardless of wealth and social status. It is therefore important to observe preventive measures proffered by WHO, NCDC and government at all levels. Government palliatives should get to the right persons and security agents deployed to enforce restriction of movements should carry out their duties accordingly.

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