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Challenges in establishing a COVID care centre in northern india

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ABSTRACT

The pandemic of COVID has hard-pressed the health infrastructure of all developed as well developing countries of the world alike. The only preventive instrument established so far to contain the virus is isolation of the diseased. Hence, establishing alternate set ups of containment area are of paramount importance in the current scenario. These make-shift centers could be utilized to admit asymptomatic or mild symptomatic to decrease the burden of already established tertiary care institutes. This would give the dual advantage of addressing the financial constraints of the Government as well as catering to all categories of COVID Patients. In light of all these benefits a COVID care centre was established in Chandigarh, a hub for medical facilities in Northern India. The idea was to convert a non-operable sarai/dharamshala into a COVID-19 management cum quarantine center. However, the setting up of such a quarantine centre was rife with challenges ranging from resistance from the locals to issues of staff and inters hospital coordination.

The enunciation of COVID care centers helped in decreasing the burden of COVID patients from tertiary care hospitals and thus helps in managing the crisis. This centre became a model for making similar new future centers.

Keywords: Quarantine centre,COVID care centre, Pandemic, India

INTRODUCTION

At the end of 2019, the WHO China Country Office was intimated of an unknown respiratory disease, detected in the city of Wuhan in Hubei province, China, which soon spread to more than 210 countries (Chen W et al. 2020, Huang et al 2020 and Zhu et al. 2020). This agent was named as SARS corona Virus 2019 (SAARS-CoV 19) (Wang et al. 2020). Owing to its high infectivity, the exponential rise in cases was seen globally leading to 3,65,24,055 with 10,62,031 deaths till 9th October (COVID-19, 2020).

In India, the first reported case of COVID 19 came to light on 30th January in the state of Kerala (John Hopkins University, 2020). And the first person who became the first SARS COV 2 fatality was from Karnataka with a travel history from Jeddah, Saudi Arabia (COVID-19 pandemic in India, 2020). He had co-morbidities of diabetes mellitus, hypertension and bronchial asthma.

He was named as superspreader as 27 of his contacts were found to be COVID positive. And more than 40000 people in 20 villages were quarantined because of him. In Asia, India tops the list with maximum cases and the third highest number of confirmed cases in the world. Till 9thOctober, there werea total 69,06,151 cases with 59,06,069 recoveries and 1,06,490 deaths as confirmed by the Ministry of Health and Family Welfare (MoHFW). The case fatality rate in India (1.54%) is relatively lower in comparison to global rate being 3.09%.(Karnataka announces 1st COVID death, 2020)

India being second populous country in the world is already facing the problem of inadequate and strained health infrastructure especially in regards to specialized hospitals. To add on it, the huge number of complicated SARS COV 2 cases that could only be managed in well-equipped hospitals, added to the brunt. As per MOHFW(Ministry of Health and Family Welfare) data released of SARS COVID 19, around 70% of patients display no or only mild symptoms(Ministry of Health and Welfare, 2020). The only preventive instrument established so far to contain the virus was isolation of the diseased. Hence, establishing alternate set ups

of containment were of paramount importance in the current scenario. These makeshift centers could be utilized to admit asymptomatic or mild symptomatic to decrease the burden of already established tertiary care institutes (Tan J et. Al. 2020). This gave the dual advantage of addressing the financial constraints of the Government as well as catering to all categories of COVID Patients.

NEED FOR TAPPING THE POTENTIAL OF TEMPORARY COVID 19 MANAGEMENT CENTERS

As per ICMR study in April, around 30% of all the proven cases were asymptomatic (Zhu W et al 2020). And various modeling studies had estimated that 40% of the transmission was by the asymptomatic patients (The Times Of India, 2020 and Nishiura H et al 2020). In India with a population of approximately 1.35 billion, the number of the asymptomatic could be as high as 40 million that turns out to be huge number leading to health management crisis. In many nations, government had resorted to home quarantine to tackle the situation. Home quarantine demands, need of infrastructure as well support of government for fulfilling the daily needs of persons. But in India, on a large-scale home quarantine was not possible owing to high density of population (Gao M et al 2020). Census figures showed that only 5% of population had houses with one room per person and around 69% households with shared rooms (Parikh P 2019). Hence in India, doing quarantine with adequate social distancing is next to impossible for many. So these makeshift facilities and quarantine centers provided an economically viable solution to provide home like quarantine and hence containing the illness from other family members along with community at large.

These centers were guided by the following principles

1. Immediate admissions of all mild symptomatic or asymptomatic patients.

2. Anxiety alleviation as all the asymptomatic or mildly symptomatic patients who could not be catered in big hospitals because of infrastructure constraints, were easily admitted in these facilities. So, fear and terror of contracting infections by others in community was allayed. Hence, people were not hesitant in reporting their status. This helped in containing this pandemic.

3. Cost effectiveness These makeshift temporary COVID care centers were usually established in some schools/colleges/community centers/Sarais, so lot of expenditure was curtailed otherwise spent on building a newly constructed hospitals. Also, the staff and other logistics were procured from parent or nearby public hospitals.

In light of all these benefits a COVID care centre was established in Chandigarh, which is a hub for medical facilities in Northern India. The idea was to convert a non-operable sarai/dharamshala into a COVID-19 management cum quarantine center. We converted Sood Dharamshala located in Sector 22, Chandigarh into COVID care Center, which came with many hindrances and problems. For this cooperation and collaboration was taken from local government, health officials including infectious disease experts and sarai officials. Utmost care was taken to abide by the WHO guidelines in COVID Pandemic (COVID-19-WHO, 2020). This included separate entry and exit for patients/staff, clean safe water, electricity and fire safety, provision of clean and hygienic food in disposable packaging, having living areas well ventilated with additional entertainment facilities, attached toilets to minimize any chances of spread by maintaining social distancing.

CHALLENGES AND HINDRANCES FACED IN ESTABLISHING THE COVID MANAGEMENT CUM QUARANTINE CENTER

Resistance by Local Residents

As this center is located in the heart of city in the residential area, so a great resistance was faced in establishing this. The local residents were gripped with fear of spread of this infection in their area by movement of patients from different institutes to this center. So help was sought from local administrative authority, police department and local leaders/representatives.

Methodical Inter Hospital Coordination

As it was first of its kind (COVID Management/Quarantine center) in Chandigarh, hence a systematic and organized inter hospital coordination was planned. A smooth transfer of mild/asymptomatic cases was done from different hospitals of city for admission in the center for active management and quarantine facilities. The transfer was done in strict adherence to the WHO guidelines i.e. patients were received in PPE kits and immediate sanitization of the area was done after receiving of patient.

Staffing Issues

This center was started with a vision to provide high quality care with minimal/scarce staff and resources to make it as model for future Pandemic/Epidemic crisis. So round the clock one resident doctor and senior consultant was deputed along with one Ayush doctor, ancillary staff like attendants, cleaners and security personal as supporting staff.

Training and Education of Staff

Training and education of the Health care personnel along with ancillary and auxiliary staff was done as per standard guidelines. Repeated sessions of training were organized for all health personnel, at different intervals of time before and during their posting in center. This was a big challenge because of the time constraint.

OUTCOME OF THE CENTER

Public Health Impact of These Centers

These centers provide an opportunity for improving the rate of admission, isolation and treatment, the major hurdles in combating a pandemic crisis. By these it's possible to render the treatment with a holistic approach and hence restricting the spread of disease. This serves the purpose of decreasing the burden of stakeholders and government.

Control of COVID 19 Pandemic

This center since its inception had admitted 250 patients in almost 1 month. This center was built in a city with a population of 1.2 million. Despite, having 2 tertiary care hospitals and many leading public hospitals in the city, admitting 250 patients in its first month of inception depicts its importance in handling this COVID crisis. This could be possible by observing standard guidelines.

CONCLUSIONS

The enunciation of COVID care center helped in decreasing the burden of COVID patients from tertiary care hospitals and thus helped in managing this crisis. It became a model for making similar new future centers.

COMPETING INTERESTS

None.

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