



## REVIEW ARTICLE



# Coping Up with Existing Non-Communicable Diseases during the COVID – 19 Pandemic – A Review.

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### Abstract

Pandemics are not new to the humankind since the rich history of our evolution has met different kinds of disasters and health emergencies are one of them and inevitable even though our medical capabilities have grown up drastically. Whenever a Public Health Emergency happens the entire nucleus shifts towards it in an attempt to mitigate it but, in these extreme situations the health systems forgo the other illnesses and patients. During this COVID – 19 the NCDs were compromised and only emergency cases were taken up by the hospitals. So other patients were tried to cope with the missed follow-ups / regular check-ups through adopting some strategies during the lockdown. This review article has explored such strategies to mitigate their illness burden from affecting their quality of life.

Keywords: Public Health Emergency, NCD, Coping up, COVID - 19, Pandemic

## 1 | INTRODUCTION:

India, being a developing country the global contribution towards the Non – Communicable Diseases (NCDs) is higher. The incidence of NCD, occurred almost a decade earlier when compared with developed countries thus leading to a contribution towards more NCD burden in the country when compared with other developing countries. But what the nation is experiencing is just the tip of the iceberg and still, there are many left undiagnosed due to a lack of knowledge on health-seeking behavior and bottlenecks in accessing healthcare.(1) This Pandemic due to COVID 19 and its impact extends itself from not only being a communicable disease but to have major impacts on NCD which rises the disease

burden in the country and completely changed the approach of the Public Health systems in tackling the NCDs.(2) Our Public Health delivery systems are built with a strong check and balance mechanisms and many health interventions are being delivered straight to the people by this only. Since it delivers comprehensive health programs the interventions targeted towards NCD also fall within this domain. But capacity capabilities are much limited for our health delivery systems due to human resource lack, minimum availability of divergent funds, diversion of available manpower to other works unrelated with health, lack of refresher training, minimizing the motivation of health workers by appointing them under contract and red tapeism. In a country like India, many people are socio-economically deprived

and relying on Public Health delivery systems for their management of NCD with suitable medication refills, timely investigations, and follow-ups. These patients are having no other means for all these to get fulfilled and coupled with economic losses which was the by-product of lockdown. This might push them towards out of pocket expenditure leading to catastrophic debt.(3,4) The sudden pandemic outbreak caused derail the health institutions from mundane activities to concentrate entirely on the COVID 19 situation because it became the most pressing matter for the health domain. This review article tries to throw light on the various coping mechanisms adopted by the NCD patients during the COVID - 19 lockdown.

In India, we have one of the flagship health programs known as the National Health Mission (NHM). It was initiated in the year 2005 and now it serves as the important platform on which India's almost every Public Health program is placed. Along with NHM another health program known as NPCDCS (National Program for prevention and Control of Cancer, Diabetes, Cardio-Vascular Diseases and Stroke) was merged. The NPCDCS was conceptualized based on the NCD burden in India. So, this review article will have its hub around the above mentioned NCDs only.

#### **Endure of Cancer Patients:**

Cancer has its significant share in the NCD burden of the country. Oncologic treatments are always continuous and closely monitored. Even chemotherapy patients were made to deal with uncertainties like lack of transport during the curfew made patients difficult in reaching the hospital, this made a psychological fear among cancer patients about the progression of the disease. This fear resulted in searching and reading about the relationship between malignancy and COVID – 19 because they are already immunosuppressed.(5) Another major reason

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for this distress among the patients was they were cut off from the counseling provided by operational level health workers who used to create that trust and bond among the patients to cope up with the disease stress.(6) These patients were managing the symptomatic remedies through OTC available medications and in some special cases patients used online delivery mechanisms for scheduled drugs. The most important coping mechanism among cancer patients was adding more immune-boosting nutrition to their diet. India is famous for its spices which is also having many positive health benefits. Cancer patients consumed more curcumin (turmeric) and cumin (jeera) which are rich in anti – oxidants and anti – cancer benefits respectively. Along with this the consumption of ficus religiosa went high which is a chief anti – cancer agent.(7)

#### **Endure of Diabetes Patients:**

Then another non-communicable disease that took the worst hit was diabetes. The management of diabetes patients will be unchallenging in an OPD but, due to lockdown, all hospitals OPD's were closed as a pre-emptive measure to stop the spread of the COVID -19 and other patients coming into contact with corona positives. As an outcome, around 80% of the diabetic patients missed their clinical visits. On the hidden contrary, there was an increase in food take by the diabetes patients during the lockdown and there was a significant increase in blood glucose level and this correlated positively with increasing age. Also, the important medical advice given to diabetic patients is to engage in regular physical activity but this also saw a dip around 70% among diabetic patients.(8) The coping up methods followed by diabetic patients were increasing the physical activity in most cases because of the availability of more free time. Decidedly there was an increase in fruit consumption among the patients which was a welcome step by the health professionals. In this lockdown many patients had a clasp on house – cooked food and little were relying on online food delivery. House – cooked food will be carefully checked for all the carbohydrates ingredients thereby decreasing the risk for hyperglycemia.(9)

#### **Endure of CVD Patients:**

Amidst the corona disaster, the concentration on the non – corona patients got diluted. When considering important NCD in the country cardiovascular diseases (CVD) cannot be forgotten. Serving as the 5<sup>th</sup> common disease for death its prevalence is around 11% when considered only south India and the opposite terrain i.e., North India the prevalence is ranging from 6 to 10%. For these patients, constant medical supervision is demanded.(10) During the lockdown, only emergency cardiac care and surgeries were taken up and the rest of the patients were advised to be on the earlier medications prescribed. Many CVD patients have experienced breathlessness, lightheadedness, weight on the chest, etc. but these patients reported in fewer numbers to the hospitals because of the corona contracting fear. All these symptoms were managed with by and large traditional home remedies. Another way for coping up found among these patients was self–monitoring of hypertension with a help of a smartphone app. Even though the efficacy of these monitoring apps is at great stake this was an easily available alternative for adoption by the CVD patients. The concept of healthy sleep was followed on par with the self – monitoring apps. Most CVD patients believe that the inevitable stress factors of life are the root causes for heart-related diseases tend to cope up with good sleeping patterns with some monitoring mechanisms. Now, the lockdown has been lifted, there will be a paradigm shift in the treatment towards the CVD patients since there will be a surge in the number of cases visiting the hospitals.

### Endure of Stroke Patients:

The Global Burden of Diseases (GBD) reported that around 6 million deaths happened in 2010 only due to stroke. The epidemiological indicators such as incidence are around 105 to 152 / 100,000 population and prevalence calculated (crudely) is around 550 / 100,000 population. This is the decade with more stroke prevalence in our country when compared to other high-income countries.(11) Due to over-whelmed hospitals during this pandemic, the stroke patients dis-continued the hospital visits due to the fear of cross-contamination from COVID – 19. These patients coped with their disability with home-based rehabilitation with the help of Physiotherapists, the only skilled resource which was available

during the lockdown period. But many times, the service of Physiotherapists also not available due to movement restrictions. The stroke patients managed their disability by doing the home-based exercise programs and muscular stretches with the help of family members with the risk of faulty postures.

## 2 | CONCLUSION:

This COVID – 19 pandemic has made the entire health systems to shift their focus away from other diseases especially NCDs. Due to this unforeseen Public Health Emergency, the NCD patients became treatment and attention naïve which made them feel vulnerable. At this commissure, self-cope up to reduce the burden of their disease affecting the quality of life was the avenue discovered by the patients. The pandemic season has lead to an exploration of different coping up strategies like nutritional approach by avoiding outside food, more consumption of fruits, use of extensive technology for self-monitoring of blood pressure and blood glucose levels, positive steps towards good sleeping habits and involving the other house members in the treatment care will improve the interpersonal connectedness underpinned with a strong emotion of solace. Now the lockdown has been lifted, more focus should be given to promoting telemedicine so that there won't be "left-behinds" in the future.

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