

## IMPACT OF COVID-19 PANDEMIC ON MENTAL AND PHYSICAL HEALTH OF GERIATRICS

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### Abstract:

*The COVID-19 pandemic is a major health crisis that has impacted the economy, livelihood, mental and physical well-being of people worldwide. Social isolation and loneliness were major contributing factors that have been linked with decline in mental and physical health during Covid-19 pandemic. During this pandemic, though all age groups suffered the consequences, older adults experienced greater adverse effects including age induced physiological changes & related complications, higher mortality, isolation induced mental health disturbances, concerns about disruptions to their daily routines and access to care. Hypothesizing about the outcomes of the current situation, the present study aims to analyse the impact of pandemic on mental & physical status of geriatric population. Methodology included telephonic semi-structured interviews in a randomly selected representative samples belonging to two different groups. Categories involved were independently living elder population & elderly persons living with family (n = 50; age ≥ 60 years). Data revealed that 88 % of elderly persons living with family experienced less impact on mental health while remaining 12% were negatively affected due to social isolation and loneliness. The physical health of 42% population belonging to the same category displayed no significant change by adapting disciplined lifestyle, however, 68% showed decline in physical health. The mental health (93%) and physical health (84%) of geriatric population living independently were negatively affected during social isolation. An improvement in mental health was observed in the remaining elderly population (7%), nevertheless the physical health (16% population) did not affect much. Research findings emphasized emotional and physical upheaval of most vulnerable group of society due to extreme restrictions imposed during pandemic while it also fostered some positive impact on them.*

**Keywords:** *Geriatrics, Social Isolation, COVID-19, Mental Health, Physical Health.*

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### Introduction:

Outbreak of Corona virus disease 2019 (COVID-19) began in early 2020 and propagated to almost every country in the world. The World Health Organization declared this novel coronavirus outbreak as global pandemic in March 2020. [1] The pandemic evoked as major health crisis to people of all age groups worldwide. Pandemic not just overwhelmed the health systems but also posed challenges for economic growth, industrial progress and overall life and morale of the population.

As preventive measure many countries imposed strict restrictions on conduct and movement of citizens. Particularly older adults (age ≥ 60 years) have been disproportionately affected by the COVID-19 outbreak owing to their

weakened immune systems and related chronic disease history [2,3] This at-risk population is considered to be more prone to COVID-19 complications and therefore recommended social isolation, staying indoors and refrained from having any contacts for a very extended period of time. [4] Due to strict restrictions imposed by public health authorities on geriatric population during pandemic, they were deprived of social support and social relationships, which have been described as protective factors against the negative physical & mental effects of the pandemic. [5, 6, 7]

These restrictions have challenged elder persons' rights to equality, sovereignty, basic needs of physical contact, and social connectedness [8]. Studies revealed detrimental effects of pandemic induced constraints on geriatric population, such as reduced physical activity, hampered sleep quality, and well-being [9, 10]. Moreover, older adults living alone [11] were found to experience severe loneliness [12], which has been associated with perceived stress and low social support. [13] Complete Lockdowns and stringent instructions to stay at home made some older adults feel restricted and captivated [14, 15]

The similar array of ill effects of pandemic-induced constraints on general lifestyle of geriatrics is encountered by Indian elderly population which constitutes 8.6% of the total Indian population. [16] As of now, Indian subcontinent is the second-worst affected in terms of the number of confirmed cases of the virus as of August 2021. [17] Though majority of geriatric population stucked to the government- imposed restrictions, it led to loneliness, depression, reduced physical movement, misperception of getting infected by corona & fear of death. Additionally, fake or false information regarding Covid pandemic, related death ratios and misguidance regarding preventive measures and treatment of corona over poured from social platforms, news channels and daily's, which embossed skeptical psychological impact on older cohorts. The concern pertained to older adults both, living with family or independently where contact with friends, and family became limited.

The present study empirically examined the transitions in physical & mental health of geriatric population residing in the urban area of the city of Nagpur, which recorded its first Covid case on 11th March 2020. Thereafter, a complete lockdown was enforced by government with strict stay-at home orders for all citizens. During these strictly enforced lockdown periods, though all age groups suffered the consequences, older adults experienced greater adverse effects including age induced physiological changes & comorbidity related complications, higher mortality, reduced physical activity which resulted in severe setback in physical and mental well-being of elderly population. It was distinctly observed that elderly population living alone have to face more psychological distress and disrupted daily routines, may be due to difficulty in adapting to digitalized services and new technologies like telemedicine, teleshopping and lack of social support. The lived experiences of geriatric population living with family and living independently were collected through telephonic interviews for abovementioned study.

#### **Method:**

The proposed study was carried out to perceive the impact of Coronavirus & related situations on mental and physical health of geriatric population. Conventionally, geriatrics have good emotional control and lesser reactivity to stress than the young ones, which comes through life experiences [18] But during this agonizing pandemic situations, anomalous behaviour patterns were seen in older adults which critically impacted mental and physical health of older adults.[19]

The survey was conducted through semi-structured telephonic interviews. The interview focused on the perspectives of subjects, experiences, feelings and various activities done by them during pandemic. The subjects were enquired about their psychological experiences and sentiments dealing with the changing environment of pandemic.

Methodology included consented telephonic semi-structured interviews in a randomly selected representative samples belonging to two different groups residing in urban area of Nagpur region, Maharashtra. Categories involved were independently living elder population and elderly person living with family (n=50; age  $\geq 60$  years) with approximately 95% subjects with comorbidities.

#### A. Procedure:

The study initiated after the telephonic consent from the participants. Subjects were briefly informed about the aim of the proposed study and also, they were given liberty to withdraw from the study at any point of research work. Participants were cognizant about the confidentiality of their responses. During the telephonic conversation, it was made sure that the participants are not undergoing any treatment for stress during pandemic. [20] The average time taken for each call was 20-25 min. The general information regarding the subjects eg. Name, age, gender, marital status, education, occupation, income and family type was collected.

The survey's emphasis was on the responses related to 1) exacerbated psychological symptoms 2) stagnancy in life 3) difficulty to improve wellness of body and mind 4) living experiences. The interview was semi-structured on the broad effects which were worrisome but not visible such as

- the elderly people having comorbidities were not attended by the medical services for health conditions unrelated to COVID- 19
- ill treatment at the care facilities and various institutions
- problems occurred during the restrictions imposed by the government
- refrain from the social contacts
- problems related to employment and earning [21]
- limited access to digital technologies and lack of necessary skill [22]
- impact on physical and mental health and trauma of stigma and discrimination [23]

#### Results:

In the present study, telephonic semi-structured interviews in a randomly selected geriatrics living independently and living with family were conducted. The data revealed that 88 % of elderly persons living with family experienced less impact on mental health while remaining 12% were negatively affected due to social isolation and loneliness. The physical health of 42% population belonging to the same category displayed no significant change by adapting disciplined lifestyle, however, 68% showed decline in physical health. The mental health (93%) and physical health (84%) of geriatric population living independently were negatively affected during social isolation. An improvement in mental health was observed in the remaining elderly population (7%), nevertheless the physical health (16% population) did not affect much.

#### Discussion:

The results of the present study permit some novel insights into impact of COVID-19 pandemic on mental and physical health of the geriatrics population (urban area of Nagpur, Maharashtra region). In the current research, elderly

population (age  $\geq 60$  years) living independently (n=25) and living with family (n=25) showed significant impact on mental and physical health during COVID-19 pandemic.

#### **Impact of COVID-19 on mental and physical health of geriatrics living independently:**

The COVID-19 crises had globally affected daily lives of most of the individuals. This inevitably laid to widespread Lockdown and preventative measures have isolated individuals that significantly impacted the economy, livelihood, mental and physical well-being of people worldwide [24]. During this pandemic, though all age groups suffered the consequences, the older people (age  $\geq 60$  years) were at greater risk than young adults [25]. The geriatrics were forced to stay home for extended periods of time to mitigate transmission risk with the coronavirus. Substantial evidences showed that the physical distancing among geriatrics induced negative impacts on physical (reduced exercise), psychological, and social effects (social isolation and loneliness; [26]. These were manifested in the forms of stress, anxiety, depression, insomnia, loss of social support, cardiovascular risk, higher threat of illness and mortality [27]-[28]. Growing body of evidences have reported a decrease in physical activity [29-31] and an increase in sedentary behaviour (sitting, lying down for long periods of time) [32]-[33] among older adults, which significantly compromised geriatrics cardio-respiratory fitness, muscle strength, and muscle mass [34].

On the similar lines, the results of the present study corroborate previous findings. In the current study, telephonic semi-structured interviews in a randomly selected geriatrics living independently were conducted. The research data revealed that the mental health of 93% of this group was significantly impaired due to social isolation and loneliness. It was observed that geriatric population living independently showed more social isolation induced psychological distress including, anxiety, depression, insomnia, higher threat of illness and mortality. They also faced disrupted daily routines, might be due to difficulty in adapting to digitalized services and new technologies like telemedicine, teleshopping and lack of social support. However, remaining 7% elderly population showed minimal impact on mental health. This might be attributed to their optimistic approach and ability to cope up with unusual stressful conditions. The physical health (84%) of geriatric population living independently were negatively affected during social isolation, nevertheless the physical health (16% population) did not affect much. The present study showed that due to lack of social support, higher percentage of older adults performed fewer physical exercises (walking, jogging, and yoga) that might have resulted in poor cardio-respiratory fitness and muscle strength. However, this pandemic has genuinely created awareness about the physical well-being of remaining 16 % geriatric population. In sum, loss of socialization, increased mental health problems and decreased physical activities, could have substantial negative impact on the elderly population those living independently.

#### **Impact of COVID-19 on mental and physical health of geriatrics living with family:**

Although elderly population displayed negative impact on mental and physical health, some positive consequences of the COVID-19 pandemic was evident [26]. Whitehead and Torossian documented strong interactions with family/friends, digital communication, hobbies, entertainment among older adults and their overall mental health was not much affected [35]. Geriatrics living with a partner or living with family members had provided great opportunity to create stronger and more substantive social connections with one another [36]. Moreover, some older population with access to digital technology may have gained confidence within them and positively cope with these unusual stressful circumstances [26, 37].

Akin to aforementioned evidences, results of present study unveiled 88 % of elderly persons living with family experienced less impact on mental health while remaining 12% were negatively affected. The older population living with family members provided the opportunity to create stronger and more meaningful social connections with one another. The emotional support and digital learning by the family members might have boost up their confidence that contributed to lesser impact on mental well-being of geriatrics living with family. However, in some geriatric population due to over protection by family members antagonistically impacted their mental health.

The physical health of 42% population belonging to the same category displayed no significant change by adapting disciplined lifestyle, however, 68% showed decline in physical health. The majority of the population (68%) showed less physical endurance and increased sedentary behaviour, due to relaxation of family support. However, many older cohorts became more aware about physical health by positively adapting with stressful situation. In this background, we suggest that COVID-19 pandemic exhibited lesser negative impact on mental and physical health among older adults living with family. However, it might have also posed positive consequences by adapting with the unprecedented situation.

#### Conclusion:

We conclude that, the spread of COVID-19 has paradoxically resulted in mental and physical health consequences for older population. Widespread lockdown induced restrictions during COVID-19 pandemic and lack of social support showed significant mental and physical health impairment among older adults living independently. However, some geriatric populations have positively reframed the situation and coped up with stressful times. The geriatrics population living with family showed less negative impact on mental and physical health during pandemic while they fostered some positive consequences by adapting with the situation.

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