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Original Research Article

Physical and psychosocial wellbeing of elderly during COVID-19

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ABSTRACT

Introduction: Covid-19, the global pandemic has come and without differentiating, it altered the lifestyle of people everywhere and changed older people daily routines, the care and support they received, their ability to stay socially connected and how they were perceived. The present study aimed to find the physical and psychosocial wellbeing of elderly during covid 19 pandemic.

Materials and Methods: A quantitative approach with descriptive design was used. 100 elderly (aged between 60 -80) who were not diagnosed with Covid 19 were selected using a convenience sampling technique. Data was collected using semi structured questionnaire to find the physical and psychosocial wellbeing of elderly during COVID 19, using self-report technique.

Results: The physical health of only 44% of subjects was satisfactory during pandemic. Eighty percent reported changes in their weight. Majority had slept less than 7 hours and duration of day time naps increased among 13% of elderly. Thirty percent missed their regular exercise during pandemic. Majority followed COVID- 19 guidelines. Thirty percent missed their medical tests and 37% missed their medical check-ups. Eighty-six percent of elderly did not avail the telemedicine facility. Sixty-five percent were satisfied with their life during the pandemic. Forty percent found difficulties in maintaining close relationships during pandemic. More than half of elderly experienced anxiety and fear of death. Seventy-two percent were mentally exhausted. Fifty-four percent were worried when family, friends and neighbours tested positive for COVID 19. Forty-six percent felt hopeless and lonely during the pandemic. Fifty three percent were not able to attend religious services and 32% were not at all satisfied in performing religious practices through an online platform. Forty six percent of elderly used social media during COVID-19 pandemic.

Discussion: The physical and psychosocial wellbeing of the elderly were affected during the pandemic. The physical health of most of the elderly were satisfactory but while considering their diet, exercise and sleep during the pandemic, most of them faced problems. The psychological wellbeing of elderly was also affected adversely. Majority of the elderly experienced anxiety, fear of death and hopelessness during the pandemic. Public health services should be equipped to handle social disengagement and loneliness through various means of connecting older adults with others, such as through telephone or video conversations or online social media platforms. Society need to be prepared with hybrid care platforms such as tele health and in-person treatment.

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1. Introduction

Corona virus disease 2019 (COVID-19) is a highly transmissible disease caused by a novel corona virus that

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emerged in Wuhan, China and was named as Severe Acute Respiratory Syndrome Corona Virus 2 (SARS-CO-V-2) by the international committee on taxonomy of virus.

The disease rapidly became globally disseminated and confirmed to be the major cause of mortality and morbidity worldwide. The mortality rates of COVID -19 showed higher incidence among elderly in United Kingdom, Italy, Spain, USA, Brazil and Belgium.

The search for effective therapies and vaccines were successful and enhanced momentum to reduce mortality and morbidity. Although COVID-19 affected all ages, individuals having co morbidities such as diabetes mellitus, asthma, hypertension, cerebral-cardiovascular abnormalities, cancer as well as immune-compromised were affected more severely and exhibited a higher mortality rate.

The disease rapidly became globally disseminated and confirmed to be the major cause of COVID -19 showed higher mortality and morbidity. Although COVID-19 affected all ages, individuals having comorbidities such as diabetes mellitus, asthma, hypertension, cerebral-cardiovascular abnormalities, cancer as well as immune-compromised were affected more severely and exhibited a higher mortality rate.

The geriatric age-group already had unique physical, psycho-social and environmental vulnerabilities owing to the frailty, which was conceptualized as a sum-total susceptibility to the physiological and psychosocial attributes associated with the age.2 Amongst all the epidemics encountered so far, COVID-19 had especially highlighted the vulnerabilities and needs of older people. 1 Older people are vulnerable to epidemics because of demographic, biological, behavioral, sociological and health care determinants. Social distancing and isolation had negative consequences on older people, unrelated to COVID-19. The rapid transmission of COVID-19 outbreaks, higher mortality rate, self-isolation, social distancing and quarantine exacerbated the risk of psychological, social and cognitive problems among elderly population.³ A survey conducted by Help Age India, among elderly during COVID 19 showed that 65% elderly livelihoods have been impacted and 67% reported worsening health conditions during the lockdown. Seventyeight percentage faced challenges in accessing essential goods and services and 61% felt confined and socially isolated in their homes.⁴

India has the second-largest population in the world and although it has a relatively young population, there are 139.6 million people aged over 60 years. COVID-19 and the efforts to prevent its spread posed unique challenges to the elderly in India. Besides being prone to isolation, loneliness, stress, grief, depression, and anxiety during the lockdown, the seniors are also victims of stigma and abuse, stemming from agism. Considering the increasing number of aging populations, such biological disasters can have notable acute and long-term consequences on overall health and well-being of the seniors, if not adequately cared for.

Older adults are at a significantly increased risk of severe disease following infection from COVID 19. Over 95% of the deaths occurred in people older than 60 years during the first wave of COVID 19. More than 50% of the people were aged 80 years and above. Thus, the key measures in the present scenario are the need to

protect, care and support older population. 9 In a survey conducted by Agewell Foundation, covering 5000 elderly people, reported in Times of India, New Delhi showed that most of the elderly missed the healing touch of their doctor as they could not visit them personally. A total of 65% elderly complained that due to the lockdown situation they have lost their independence, self-esteem and even dignity to some extent as they had to depend upon others and smartphones. 10 Sarah De Pue, Céline Gillebert, Eva Dierckx et.al conducted a study on the impact of COVID 19 on the wellbeing and cognitive function of older adults showed that the wellbeing, level of activity, quality of sleep and cognitive functioning of older adults was severely impacted. 11 All changes reported during the COVID-19 period were strongly related to depression. 1 The World Health Organization (WHO) has warned that the impact on mental and psychosocial wellbeing of vulnerable groups, such as older adults, will be large and enduring. 11

A study was conducted by Padmakumar Balasundaram et.al on the effect of COVID 19 lockdown on health care and psychosocial aspects of elderly in Kerala showed that 6.3% missed regular medication during the lockdown. Forty nine percent missed their regular exercise. Only 18.1% had used the telemedicine facility. Lockdown had adversely affected the health care and non-COVID medical services of the elderly. Fear of COVID infection and the presence of possible COVID infection symptoms were associated with psychological distress and anxiety. ¹²

Older people were disproportionately affected by the COVID 19 pandemic. The wellbeing of the elderly during this situation was a major concern. The elder section of the community was isolated physically and mentally in households as a part of reverse quarantine during the days of COVID 19 pandemic. They had poor access to medical care, lack of communication and poor social interaction due to infection prevention protocols regarding COVID 19 spread. While there had been much discussion about the symptomatology, morbidity and mortality pattern of COVID 19 in the elderly, conducting a study to assess the physical and psychosocial wellbeing of elderly in Kerala, which has the highest proportion of elderly population in India, $(16.5\% \text{ as per } 6^{th} \text{ August } 2021^{13})$ is necessary. It is because of the negative impacts of COVID 19 among the lives of elderly, researchers have recognized the importance of this particular study topic.

2. Materials and Methods

The study was conducted as a part of the research project, as partial fulfilment of the requirement of completion of the academic degree course in the Bachelor of Science in Nursing Program. A quantitative approach with descriptive design was selected for the present study. The study was conducted in a selected panchayath in Ernakulam, Kerala among 100 elderly were selected using convenience

sampling technique. The elderly were between 60-80 years of age, not tested positive for COVID 19, could independently read and write in Malayalam, were physically and mentally fit, willing to participate in the study, present at the time of data collection and only one subject from a household was selected. Participants were excluded if acutely ill during the time of data collection. Written permission from the panchayat president was obtained for conducting the study. Informed consent from the subjects was obtained.

2.1. Tool for data collection

The following tool was used for data collection

A semi structured questionnaire to find the physical and psycho social wellbeing of elderly which had three sections.

- 1. Demographic characteristics: It included age, gender, educational status, occupational status, the status of the spouse of elderly (alive or not), type of family, source of income, any co morbid illness, recent acute episodes and management of illness.
- 2. Semi structured questions to find the physical wellbeing of elderly during COVID 19: This section had items related to the physical wellbeing of elderly in terms of quality of life, balanced diet, sleep and rest, exercise and health during COVID 19 as reported by the elderly.
- 3. Semi structured questions to find the psychosocial wellbeing of elderly during COVID 19: This included questions regarding the psychosocial wellness experienced by elderly in terms of life satisfaction, interpersonal relationships, emotional health and spiritual health during COVID-19 pandemic as reported by them.

The test-retest reliability of the tool was established and the tool was found to be stable.

2.2. Data collection process

After getting formal written permission to conduct the research study from the panchayat authorities the data collection was done from 03-03-2022 to 07-03-2022 at a selected panchayath at Ernakulam district, Kerala, India. The researchers priorly sought help from the ASHA worker and gained knowledge about the elderly residing in the panchayath and visited each house and selected sample who fulfilled the inclusion criteria. Informed consent was obtained from the subject after explaining the purpose of the study. It took an average of 25 minutes to complete the semi-structured questionnaire by the elderly. The completed form was collected by the researcher.

3. Results

3.1. Sample characteristics

The details of sample characteristics are given in Table 1.

Of the 100 participants majority were male (57%), had education of class 5-7(59%) were daily wagers (67%). The spouse of most of the elderly were alive (65%). Fifty percent had son or daughter or their spouse to help them at home. All of them lived in nuclear family. Seventy-one percent of elderly availed National old age pension and pension was the main source of income for majority of the elderly (57%). The most common co-morbid illness reported were Diabetes Mellitus (38%), Hypertension (32%), Stroke (23%), Heart disease (17%), Arthritis (13%) and Cancer (9%). Sixteen percent had recent episodes of illness during COVID 19. Forty-two percent were on home quarantine when their family members were suffering from COVID 19.

Table 1: Demographic characteristic of the elderly N-100

Demographic	Frequency(f)	Percentage
characteristics		(%)
Gender		
Male	57	57
Female	43	43
Education		
Class 5-7	59	59
Class 8-10	41	41
Occupation		
Government	04	04
employee		
Private employee	02	02
Daily wages	67	67
Homemaking	27	27
Spouse		
Alive	65	65
Not alive	35	35
Helper		
Son/daughter	50	50
Grand children	00	00
Helper	00	00
Spouse	50	50
Family		
Nuclear	100	100
Pension		
National old age	71	71
pension		
Widow pension	07	07
Agriculture	18	18
labour pension		
Service pension	04	04
Source of income		
Pension	57	57
Business income	27	27
Others	16	16

3.2. Physical wellbeing of elderly during COVID 19

The detail of physical health of elderly during Covid 19 is given in Figure 1. Forty-four elderly reported that their health was satisfactory and thirty reported of poor health

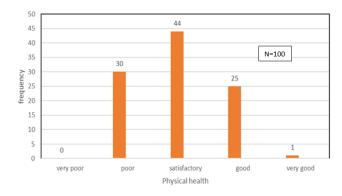


Fig. 1: Frequency distribution of physical health of elderly during COVID 19

Further analysis revealed that eighty-one percent of elderly consumed 4 meals a day whereas 42% were not able to follow prior diet plan during COVID 19. Forty-six percent were sometime able to consume nutritious vegetables and fruits. Nobody skipped meals. Forty-two percent of the elderly reported weight loss and 20% reported weight gain during the pandemic. Sixty-one percent slept less than 7 hours, 33% had a change in their time of going to bed, none of the elderly experienced any difficulty in falling and staying asleep, in 31% there was an increase in day time nap hours. Thirty percent of the elderly missed their morning walk or exercise during the pandemic due reason like; fear of getting infection, no company to exercise with, or due to reverse isolation protocols. All of them followed covid 19 protocols by wearing a face mask when getting out of home, frequent hand washing, avoiding social gatherings, using sanitizers and following social distancing. Sixty-seven percent faced problems in meeting dietary requirements during the pandemic due to the closure of grocery shops, higher prices of groceries, difficult transportation, low income to procure groceries and the fear of infection from outside products. Thirty percent missed their regular medical tests and 29% missed their regular medicines. Majority (86%) did not use the telemedicine facility; those who used it availed through mobile applications.

3.3. Psychosocial wellbeing during COVID 19

Table 2 depicts the state of mood, life satisfaction and interest in participating activities of elderly during covid 19.

On further analysis it was found that 71% of elderly were able to readily accept the COVID 19 policies. Forty-two percent reported to have a peace of mind while 86% were able to stay positive. Thirty-five percent of elderly most of time found it difficult to maintain close relationships.

Table 2: Psychosocial wellbeing of elderly during COVID 19 N-100

Psychosocial wellbeing	Frequency(f)	Percentage(%)
State of mood		
Tensed	12	12
Angry	08	08
Sad	18	18
Fine	21	21
Нарру	11	11
Disgust	15	15
Fear	15	15
Life satisfaction		
Satisfied	65	65
Not satisfied	35	35
Interest in participating in activities		
Interested	13	13
Not interested	87	87

Fifty-two percent were supported by their family members for their needs. Fifty- two percent felt disturbed when they were not able to attend family meetings and more than half (62%) experienced anxiety for their health. Ten percent were not able to experience pleasure in day- to -day activities and 58% experienced pleasure sometimes in performing activities. Sixty-seven percent were able to control their worries while 59% did not lose control over their emotions. Fifty-two percent of the elderly did not feel lonely, whereas 22% either felt lonely sometimes or most of the time and 4% of elderly always felt lonely. Six percent always had fear of death and 72% felt mentally exhausted. Twenty-one percent always had fear of being a burden to family or children. Fifty-four percent were worried when family, friends or neighbours tested COVID positive. Eighty-seven percent were not interested in participating in activities. Fifty-four percent did not feel hopeless about the situation. Fifty-three percent were not able to attend religious services during the pandemic. Thirteen percent always felt COVID 19 affected their beliefs, values and spiritual practices. Thirty-two percent were not at all satisfied in performing religious rituals through an online platform, 18% were satisfied sometimes, 38% were satisfied most of the time and 12% were always satisfied. Ninetythree percent were concerned about restricted access to pilgrim centres during the pandemic. Seventy-six percent were found to be interested in COVID 19 updates. Fortysix percent used social media to stay in contact with each other.

4. Discussion

The present study throws light on the physical and psychosocial wellbeing of elderly during COVID 19

pandemic. In the present study, more than half of the subjects were males, had education of class 5-7, were working for daily wages, spouse was alive, had son/daughter or their spouse to help them at home, availed National old age pension as the main source of income and diagnoses with Diabetes Mellitus. Whereas female predominance and majority had high school or university degree in study conducted by Sarah De Pue et.al. ¹¹ In another study conducted on the effect of COVID 19 lockdown on healthcare and psychosocial aspects of elderly in Kerala ¹² showed that majority were males, about 74.3 % were employed, about 54.1 % had support from spouses and 38.2% from sons/daughters. Hypertension was the most common medical condition (46%) followed by Diabetes Mellitus.

In the present study, most of the subject's appetite had not changed during COVID 19. Eighty one percentage of subjects consumed 4 meals and 42% were not able to follow prior diet plan during COVID 19. These findings is supported by another study conducted by Marjolein Visser, Laura A Schaap and Hanneke A H Wijnhoven 14 on impact of COVID 19 pandemic on physical activity and nutrition in Dutch older adults living independently which showed that snacking more was reported by 20.3–32.4%.

In the present study, 46% of the subjects were able to consume nutritious vegetables and fruits, sometimes, 42% consumed most of the times and only 16% were able to consume nutritious fruits and vegetables always. Majority of the subjects faced problems in availing dietary requirements during the pandemic due to the closure of grocery shops, higher prices of groceries, difficult transportation, low income to procure groceries and the fear of infection from outside products. These findings were similar to the findings of a survey conducted by Help Age India 15 to assess impact of lockdown in elderly livelihood among 5099 elders showed that 65 percent of elderly faced difficulty in accessing food, groceries and medicine during lockdown.

In this study none of the subjects skipped meals during the pandemic which is contradictory to the findings of the study among Dutch older adults living independently on the impact of COVID 19 pandemic on physical activity and nutrition showed that 6.9–15.1% of subjects skipped their meals during the pandemic. ¹⁴

The significant findings regarding sleep pattern of elderly, including Thirty three percentage of subjects bedtime changed most of the times during the pandemic, and thirty one percentage of subjects day time nap hours increased during COVID-19, 17% of subjects decreased day naps were supported by various studies on sleep in older adults and its relation with COVID 19, which showed that increased prevalence of sleep disorders such as obstructive sleep apnea and insomnia and poor quality of sleep. ^{16,17}

The present study found that the physical activity and exercise in older adults showed a decrease, with prepandemic level was similar to the study finding which showed a progressive decrease in physical activity and exercise during COVID 19 ^{12,16,18,19} In the present study, the findings depicted that all of them practiced wearing a face mask when getting out of home, hand washing, avoided social gatherings, used sanitizers and followed social distancing. Similar findings were found on research by J. F. Daoust ²⁰ which showed that being the most vulnerable population, elderly had followed all the guidelines proposed by the government, including the reverse isolation protocols.

Majority of elderly missed their regular medical checkup and medical test during pandemic which was similar to the findings by Padmakumar Balasundaram G.K Libu, Christeena George and Alex J Chandy ¹² and survey by age well foundation showed health of elderly were affected adversely during the pandemic, they missed the healing touch of their doctor, as they could not visit them personally. ¹⁵ Similar findings were found on study conducted in Kerala ¹² as 29% of elderly missed their regular medicines in the present study.

In the present study only 14% of subjects had used the telemedicine facility, and they utilized it through mobile apps. Similar findings were seen in a study conducted by Kenneth Lam and Ying Shi²¹ on the acceptance of telemedicine facilities by older adults during the pandemic showed that 20% of subjects were not ready for telephone method due to hearing problem and 72% of elderly were not accepting it due to poor education, socioeconomic status and lack of support personnel. Another study conducted by Padmakumar Balasundaram, G.K Libu, et.al ¹² showed that only 18.1% had used the telemedicine facility and 24.8% had no knowledge about it, which supports the findings of the present study.

In the present study 33% were not able to control their worries and lost control sometime and 3% lost control most of the time These findings were supported by a study conducted by W. Sepulveda-Loyola, F. Ganz and D. V Oliveira ¹⁷ showed that the mental and physical health in older people is negatively affected during the social isolation for COVID-19.

In the present study 22% felt lonely most of the time and 4% always felt lonely during COVID 19. This finding is similar to another study conducted by Theo G van Tilburg, Stephanie Steinmetz, Elske Stolte, Henriëtte van der Roest, and Daniel H de Vries²² which showed that the respondents were feeling social loneliness (0.21%) and, especially emotionally lonely (0.49) during the pandemic and also similar to another cross-sectional study conducted by Eleni Parlapani, Vasiliki Holeva, Vasiliki A. Nikopoulou, Konstantinos Sereslis, et.al ²³ showed that significant proportion of the participants reported moderate to severe depressive symptoms (81.6%), moderate to severe

anxiety symptoms (84.5%), as well as disrupted sleep (37.9%). Similar findings were also obtained in a study conducted to analyze the psychological impact of COVID-19 among the elderly population in China by Hui Meng, Yang Xu, Jiali Dai, Yang Zhang, Baogeng Liu, and Haibo Yang ²⁴ which showed that 37.1% of the elderly during COVID-19 experienced depression and anxiety.

In the present study, the data regarding the spiritual wellbeing showed that 53% of subjects were not able to attend religious services during the pandemic, Twenty five percentage of subjects felt COVID 19 affected their beliefs values and spiritual practices, 30% of subjects sometimes felt, 32% felt most of the time and 13% always felt. Thirty-two percentage of subjects were not at all satisfied in performing religious rituals through an online platform, 35% feared sometimes, 27% feared most of times and 10% always had fear of death. More than half of the subjects (62%) experienced anxiety about their health during the pandemic. Similar findings were depicted in a study conducted by Rababa M, Hayajneh AA, Bani-IssW²⁵ on the association of death anxiety with spiritual well-being and religious coping in older adults during the COVID-19 pandemic, majority of the participating older adults were found to have low levels of religious coping and spiritual well-being and high levels of death anxiety. Mustafa Durmus and Erkan Durar conducted a study on the relationship between spiritual well-being and fear of COVID-19 among Turkish elders. Subjects with chronic disease had psychosocial fear levels above the mean, with somatic, economic and social fear levels below the mean. ²⁶

4.1. Strengths and limitations of the study

The study addresses a major problem area as the pandemic is still pervasive. The major limitations of the study were that it was conducted only in a panchayath, which may not be a true representation of the target population. Other limitation includes the sample size, as it was only 100 subjects who had participated. Self-rating and self-reporting technique requires honest and accurate rating, the results of this study need to be used with caution while generalization.

5. Conclusion

The world has experienced pandemic COVID-19 on an unprecedented scale. The virus caused worse outcomes and a higher mortality rate in elderly. The joint World Health Organization-China fact-finding mission found that patients older than 60 years and those with co morbidities had the highest risk for complications and death. ²⁰ The physical and psychosocial wellbeing of the elderly were affected during the pandemic. The physical health of most of the elderly were satisfactory but while considering their diet, exercise and sleep during the pandemic, most of them faced problems. The psychological wellbeing of elderly was also affected adversely. Majority of the subjects

experienced anxiety, fear of death and hopelessness during the pandemic. They were not able to maintain interpersonal relationship and spiritual wellbeing during lockdown and reverse isolation measures.

6. Source of Funding

None.

7. Conflict of Interest

Authors would like to declare that there are no conflicts of interest in this study and no funding had been received to carry out the research.

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