The Long Road to Recovery:
An Investigation into the Health and Wellbeing of Older Adults in India who Survived Covid-19 and its Implications for Social Work Practice

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Abstract

The pandemic has undoubtedly affected almost every aspect of life for people around the world. However, the most affected are older adults living in developing countries like India. In fact, the second wave of the pandemic in India, was the most devastating wave so far. Now that the worst appears to be over, there is a need to study the impact of the pandemic on the wellbeing of older adults recovering from the virus in the country. Hence, the aim of the present study is to examine the long-term impact of covid 19 on older adults, its connection with wellbeing, and the role of social workers in their recovery. A total of 203 older adults from India took part in the study. The results show that the majority of the respondents have poor wellbeing and have been more frequently plagued by chest pains, fatigue, and isolation, ever since they became infected. Moreover, respondents who are female, those with co-morbidities, and are suffering from other problems such as frequent chest pains, fatigue, and feelings of isolation, have lower levels of wellbeing. The implications of social work practice have also been discussed in the full paper.

Keywords: Wellbeing; Older adults; COVID-19 recovery; Geriatric health; India

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Declaration of Interest

The authors report that there are no competing interests to declare.

Data Availability

The dataset associated with the present study can be found at https://doi.org/10.6084/m9.figshare.19487936.v1

Introduction

Around the world, along with an improvement in the life expectancy of people with chronic illnesses, there has been a decrease in the number of family caregivers for the aged (Tompkins et al., 2020) and this is particularly concerning for everyone living in the pandemic era. In the past few years, there has been a tremendous amount of research interest on the impact of the pandemic on older adults (Bonifas, 2021). This is because, since the beginning of the spread of covid-19 in December, 2019 (Casagrande et al., 2020), there has been a lot of suffering worldwide and it is older adults who have been classified as the most vulnerable. Globally, as of November, 2023, a total of 6,988,679 people have died as a result of COVID (World Health Organization, 2023a). Apart from the massive death toll, the pandemic has inflicted unbearable pain and untold suffering among older adults, who disproportionately suffer the more serious complications caused by the virus (Nanda et al., 2020). Globally, the virus was able to penetrate more than 220 countries, territories, and areas (Das et al., 2022). Not only did the virus result in the death of millions of people, but it also led to a significant amount of disruption in the healthcare system (Arsenault et al., 2022). This is an important point to note as the disruption of access to healthcare services due to lockdowns caused by the virus prevented many from securing the medical treatment they required to continue leading a healthy life. Although there are estimates of the number of people who died as a direct result of infection, there is a paucity of data on the number of people who died due to the lack of timely medical care caused by the virus-induced lockdowns. There is however some data that highlights the extent to which COVID-19 directly as well as indirectly impacted the delivery of healthcare systems. For example, it was found that globally, 80 per cent of the HIV programmes and 75 per cent of Tuberculosis programmes were disrupted due to COVID-19, apart from the disruptions in childhood vaccinations in 68 counties by May, 2020 (Meyerowitz-Katz et al., 2021). Therefore, COVID-19 caused dual destruction at a global scale by not only directly causing deaths

due to infection but by also causing an unaccounted number of health complications and even deaths through the disruption of everyday life and access to healthcare services.

Almost all the countries in the world experienced the pandemic in a three-wave format. The timelines were slightly different for each country due to a wide variety of factors. In the United States for example, the first wave hit the nation in March, 2020. The second wave began in July, 2020, while the third wave occurred in 2021, right after Christmas (El-Shabasy et al., 2022). In India, the first wave began in July, 2020. The second wave occurred in March, 2021, and the third wave occurred in January, 2022 (Singh et al., 2022). The damage was extensive, particularly during the initial wave. For example, in the US, the fatality rate was over ninety per cent among those who were eighty years or above and who were on ventilator support (Powell et al., 2020). It was also predicted early on that the pandemic-induced lockdowns would lead to increased social isolation and loneliness among older adults worldwide (Wu, 2020). Accordingly, in 2020 and 2021, several studies from different parts of the world reported this growing and worrying trend (Kotwal et al., 2021; Savage et al., 2021; van Tilburg et al., 2021). There have also been reports of certain long-term physical consequences of COVID-19 such as fatigue (Lopez-Leon et al., 2021), chest pain and shortness of breath (Yelin et al., 2020), and possibly even the progression of cancer (Saini & Aneja, 2021). These issues require a closer examination, especially among older adults who have been previously infected by the virus and are still recovering from the long-term problems being posed by the virus.

The impact of the virus was felt early on in India as well with almost a million infections by July, 2020 (Ghosh et al., 2020). By September, 2020, 62,288 people in India had already lost their lives due to COVID-19 (Chatterjee, 2020). The outbreak became extremely serious for older adults as they were more at risk of facing death than the young (Bhatnagar et al., 2021). It was not just death, but also isolation and lack of mental health support in general that led to a significant amount of

suffering among older adults during lockdown (Vahia & Shah, 2020). Another relevant fact regarding this issue is that those with co-morbidities such as diabetes, hypertension, and cardiac diseases, were found to be at a greater risk of experiencing severe illness caused by the virus (Dalal et al., 2020). Since many of these co-morbidities are found more commonly among older adults, this increases the risk of mortality among them (Shahid et al., 2020). Although there have been studies that have warned about the long-term effects of the COVID-19 restriction measures on the mental health of older adults and the general population (Gorenko et al., 2021; Stolz et al., 2021), the gravity of the problem is yet to be fully understood since it is has only been two years since the World Health Organization first announced the emergence of the pandemic (Singh & Singh, 2020). The World Health Organization (2023) estimates that as of November, 2023, 5,33,316 people have died as a result of covid in India. Furthermore, co-morbidities such as diabetes, hypertension, and heart disease contributed to an estimated 80 per cent mortality rate among COVID-19 patients who were 50 years or above (Singh et al., 2023). Apart from the disruptions in the healthcare system, the pandemic also resulted in negatively impacting the wellbeing of healthcare workers in the country (Krishnan & Butola, 2022) apart from forcing the educational institutions to switch to the online mode of education that hindered the learning experience of several students from rural areas, many of whom did not have access to certain basic amenities necessary for online classes such as a broadband connection and laptop computers (Krishnan & Joseph, 2023).

Another hidden problem posed by the pandemic was the stigma attached to people who were infected. The stigma attached to people infected with COVID-19 was clearly visible in India. For example, in a cross-sectional study that included respondents from seven states in India, a little more than half of the total respondents reported the prevalence of severe stigmatizing attitudes towards those who were infected with COVID-19 (Adhikari et al., 2022). It is important to note that the stigma attached to COVID-19 had a significant impact on the infected individuals who wished to seek the support of the community to help heal. In one study conducted in the Indian state of

Kerala, the single largest majority (39.3 per cent) wanted to keep the infection a secret as they feared being stigmatised and discriminated upon by others (Chandran et al., 2022). By the end of 2022, in India, there was a sense of relief when the third wave powered by the Omicron variant (Viana et al., 2022) subsided. However, the stigma related to COVID-19 exists even to this date and is a major psychological and social hurdle for those who are looking to recover from this deadly virus.

There is also a paucity of studies on the long-term effects of COVID-19 on both the physical health and mental wellbeing of older adults in India. The researchers felt that now that the third wave has weakened and sufficient time has passed since the first wave, it is now appropriate to examine the long-term impact of the virus on the study population. It is also hoped that the study will not just highlight the long-term consequences of the virus being faced by older adults in India, but will also be able to provide suitable suggestions and throw light on its implications for social work practice. With these two objectives in mind, the present study was undertaken.

Methodology

Since the present study is primarily aimed at investigating the possible long-term impact of COVID-19 on the physical and mental health of older adults in an objective and generalizable manner, a quantitative research method has been adopted by the researchers (Guo, 2013). Moreover, the study explores several facets connected to physical and mental wellbeing, that could help identify those previously infected older adults who need the most support among others in the Indian context. Now that three waves of the pandemic have swept the country, a clearer picture could emerge, possibly leading to novel findings that have hitherto remained hidden. Hence, the present study adheres to an exploratory research design (Mollick, 2014). A three-part questionnaire including the World Health Organisation's wellbeing index was used to collect data from the respondents. The questionnaire was in English.

Participants and Recruitment

As a result of the stigma attached to COVID-19 in India (Bagcchi, 2020), it is challenging to come across individuals who openly admit that they were infected with COVID-19. Hence, the researchers adopted snowball sampling (Handcock & Gile, 2011), Generally, those who are 60 years and above are considered to be older adults (Pilania et al., 2019). This is why only those respondents who were 60 years or above and were previously infected with COVID-19 have been included in the present study. However, those who were still infected with the virus were excluded from the study as the study is focused on the long-term recovery process of older adults who have been infected with COVID-19.

Data Collection

A questionnaire was used to collect data from the respondents. The first part had questions relating to the background characteristics of the respondents. The second part had COVID and recovery-related questions. Questions/items under this section included the number of months it had been since the respondents first got infected, the number of times they have been infected with COVID-19, and whether they were feeling more fatigued and isolated, or experiencing chest pain, more often than they were before they became infected. The responses for all these issues were measured on a five point likert scale with responses ranging from strongly agree to strongly disagree (McCroskey, 1966). It was also enquired whether the respondents were suffering from co-morbidities such as diabetes, high blood pressure, cardiovascular problems, and cancer. The third part contained the five-item wellbeing scale developed by the World Health Organization (Topp et al., 2015) with a higher score indicating better wellbeing. This tool was included as existing literature suggests that the pandemic could negatively impact the wellbeing of older adults (del Rio et al., 2020; Fisher et al., 2021). The Cronbach alpha value of the tool was found to be 0.89, which suggests that the scale is reliable (Taber, 2018). A pre-test was carried out using three respondents who did not find any difficulty in comprehending any of the questions/items in the questionnaire. Hence, no changes were made to the questionnaire before final deployment. The typical respondent had to spend about ten minutes to respond to the questionnaire.

The data were collected using social work professionals working with older adults. The social workers approached the individual residents in the old age homes who had experienced COVID-19 and sought their consent to participate in the study. Those who were interested were handed over the electronic questionnaire which was then filled by the respondents. The respondents had to agree to a written consent form before filling out the questionnaire. A total of 206 responses were collected of which three were incomplete and therefore discarded. Hence, the final sample consists of 203 responses (N = 203) from Karnataka and Kerala. As mentioned previously, descriptive statistics apart from the Kruskal-Wallis test were used by the researchers.

Data Analysis

The collected data which was stored in a password-protected personal computer was analyzed using PSPP, a data analysis software (Yagnik, 2014). Apart from descriptive statistics, the researchers used the Kruskal-Wallis test, which is a non-parametric alternative to One-Way Analysis of Variance (ANOVA), to discover the association between the selected independent variables and wellbeing. The researchers chose Kruskal-Wallis over ANOVA since the Kruskal-Wallis test is more appropriate and powerful while dealing with non-normal distributions as in the case of the present data set (Hecke, 2012).

Ethical Considerations

Apart from securing written consent from the respondents, the researchers have adhered to the ethical principles laid out in the Belmont Report (Zucker, 2007) and have secured ethical clearance from the institution.

Results

The results of the percentage analysis can be seen in Table 1. One interesting finding, among others, is that the single largest majority of the respondents agree or strongly agree with the statement that ever since they became infected with COVID-19, they have been feeling more fatigued (57.1 per cent agree and 19.7 per cent strongly agree) and isolated (45.8. per cent agree, and 11.8 strongly agree) apart from increasing instances of chest pain as well (44.8 per cent agree

and 13.3 per cent strongly agree). This set of findings is in line with the existing literature on the matter (Ejaz et al., 2020; Yelin et al., 2020) and are worrying trends that need to be acknowledged and addressed at the earliest. As far as the level of wellbeing is concerned, the fact that a significant number of the respondents either have average (41.9 per cent) or poor levels (32.5 per cent) of wellbeing, provides support to the idea that COVID among older adults and wellbeing could be inter-linked. This is because, in general, it is believed that wellbeing has a U-shaped trajectory (Luhmann, 2017) with middle-aged adults experiencing the lowest levels of wellbeing and then experiencing an improvement in old age. However, in the present study, a different picture has emerged which hints at the possible role of COVID-19 on the wellbeing of respondents.

Results of the Kruskal-Wallis Test

The results of the Kruskal-Wallis test can be seen in Table 2. Due to space constraints, only the results that turned out to be statistically significant have been presented.

Gender and Wellbeing

A cross-tab analysis between gender and health issues shows that the majority (77.8 per cent) of the respondents with three or more than three health issues, were women. In this scenario, being previously infected by COVID might also be a contributing factor leading to an overall decreased level of wellbeing.

Health issues at the time of being infected and Wellbeing

One possible explanation for those with cancer and cardio-vascular problems having the lowest mean rank of wellbeing compared to others is the disruptions in access to regular health checkups, especially for cancer sufferers (Mitra & Basu, 2020) and cardio-vascular patients in the country (Kaushik et al., 2020).

Fatigue after infection and wellbeing

Unfortunately, lower wellbeing among older adults who have been previously infected with covid might be incorrectly dismissed as a symptom of co-morbidities (Wang & Kim, 2020), which the majority of the respondents in the present study do suffer from.

Chest pains after infection and wellbeing

The increase in the frequency of chest pains since being infected with COVID-19 is negatively impacting the wellbeing of the respondents. Furthermore, a Spearman's rank correlation analysis between the number of months that have passed since being infected with COVID and the issue of chest pains indicates that there is a statistically significant and negative correlation between both ($r = -0.20$; $p = 0.004$) which means that with the increase in the number of months since being infected with covid, the respondents are less likely to experience frequent chest pains. This provides statistical strength to the fact that COVID and issues like chest pain which are closely associated with the wellbeing of respondents, are indeed inter-related.

Isolation after infection and wellbeing

The link between isolation and wellbeing among older adults has been observed in the present study. Moreover, Spearman's rank correlation between the number of months since being infected with COVID-19 and isolation has revealed that there is a statistically significant negative correlation between both ($r = -0.7$; $p = 0.0151$). In other words, as the number of months since being infected increases, the feelings of isolation among the respondents decrease. There is some evidence to link COVID-related policies and isolation among older adults (Brooke & Jackson, 2020) and the fact that this is also closely associated with lower wellbeing is very clear.

Discussion, Limitations, and Implications for Social Work Practice

In general, the majority of the respondents do not have a good level of wellbeing. Moreover, being female was found to be associated with lower levels of wellbeing. With regard to gender, the findings of the present study are similar to the one observed in another recent study among older adults where older women tended to have lower levels of wellbeing (Kieny et al., 2021). There is also some previous scientific evidence of COVID having a great impact on the health and wellbeing of older women in particular (VoPham et al., 2022). It is important to also note that the majority of those with three or more co-morbidities in the present study were women, which is the other possible factor that could be leading to lower levels of wellbeing among female respondents

compared to males. As far as co-morbidities are concerned, there is some scientific proof that COVID could lead to the progression of cancer (Saini & Aneja, 2021) and this in turn could be adversely impacting the wellbeing of the respondents after being infected. The government, hospitals, and non-governmental organizations need to collaborate to reach out to those suffering from co-morbidities and in particular, those suffering from serious ailments such as cancer and cardiovascular problems. Now that internet connectivity in the country has developed to a certain extent, telemedicine and telecounseling services can be offered to such individuals on a regular basis, especially during lockdown periods. Furthermore, medical social workers could help organize meditation camps for people with physical health issues as it is shown to have beneficial effects on Individuals (Monk-Turner, 2003). For those who are experiencing fatigue, there might be a need for them to re-evaluate their lifestyle and seek the advice of dieticians and wellbeing experts on how to manage the problem. The results support the existing literature on post-COVID fatigue (Wostyn, 2021) which appears to be adversely impacting the wellbeing of the respondents. In the case of those who are in old age homes, there is a need for social work professionals working there to identify those who have recently recovered from COVID and provide them with additional care until their symptoms improve and they are back to normal. Those who are experiencing frequent chest pains also require periodic checkups to prevent their symptoms from worsening. This is explained by the point that physical co-morbidities/health issues have been known to lower subjective wellbeing among individuals (Wang & Kim, 2020). In this context, medical social workers could conduct home visits for those COVID-19-affected older adult patients who have been discharged from the hospital. This will help monitor the problem and help them secure medical assistance in time if the symptoms worsen. With regard to isolation among older adults and its association with wellbeing, a link has been established in a previous study (Chappell & Badger, 1989) and as expected, the same can be observed in the present study as well. Social workers could conduct casework interventions with families to help improve familial bonds and prevent older adults from feeling left out. For respondents who are in old age homes, it is the moral and

professional responsibility of the management to reach out to family members of the respondents and encourage them to visit their older adult relatives from time to time. Apart from this, old age homes could work together with hospitals and conduct laughter therapy to help lighten the atmosphere and improve bonding among members. This is because existing literature suggests that laughter and humour interventions appear to enhance the wellbeing of older adults (Gonot-Schoupinsky & Garip, 2018). Currently, there is a need to promote gerontology in India and encourage more social workers to explore as well as specialize in it, because with the improved healthcare facilities, the population of the aged is set to increase in the coming years and to cater to their special needs, social workers need to be aptly trained and specialized in it. Although India has traditionally stood for strong family ties and deep familial bonds, over the years, the trend of leaving behind aged parents and moving abroad has been seen. While moving away to seek better economic opportunities is understandable, it also has to be accepted that this is resulting in a family void and is generating a sense of isolation among older adults that is certainly exacerbated by COVID-19 as the results suggest. This brings us to the other major issue which is yet to be fully investigated but there is sufficient proof of its existence, that is, the stigma associated with being infected. Even if the individual fully recovers from the infection, they are often excluded, especially in rural areas where the knowledge on the subject among many, is limited. Hence, social work students and professionals could plan and organize awareness campaigns in both urban and rural areas, particularly in rural areas on how the virus spreads and that an individual after recovering from the infection can no longer transmit the virus. Only when the perspectives of individuals on the matter change, can one witness a societal change, a change that will help ensure a better level of wellbeing among older adults who have survived COVID-19 and are recovering from its long-term impact. The present study has certain limitations that need to be mentioned. First of all, this is a study that is largely confined to India which has its own unique social and cultural norms which might have played a role in influencing the mental health of the respondents. Secondly, the study only includes data that were collected at one specific point in time, therefore limiting the scope of

the study to some extent. A longitudinal study could have yielded even richer data. Perhaps future studies of this nature could fill these gaps.

Conclusion

It appears that problems such as chest pains, fatigue, and isolation, among older adults are possibly aggravated by the virus as seen from the results. Even more troubling is the fact that very few respondents actually had a decent level of wellbeing, which is contrary to the U-shaped trajectory of wellbeing in general. Older women in particular seem to have a lower level of wellbeing compared to older men. Apart from the possible social work interventions that have been suggested, there is a dire need for an attitudinal shift in the way older adults affected by COVID-19 are viewed in today's society. Only when their special needs are rightfully acknowledged, their long road to recovery from COVID-19 can be truly successful.

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Table 1-Percentage Analysis (N =203)

Variables	N	Percentage	Mean (min) (max)
Age group (yrs) 60-70 71 and above	 160 43	 78.8 21.2	68.18 (60) (95)
Gender of the Respondents			
Male Female	78 125	38.4 61.6	
Religion			
Hindu Muslim Christian Other	61 03 132 07	30.0 1.5 65 3.4	
Number of months since being infected with covid			
0-6 months ago 7-12 months ago More than 12 months ago	133 50 20	65.5 24.6 9.9	6.56 (1) (25)
Health issues at the time of being infected with covid			
High blood pressure Cardiovascular problems Diabetes Cancer Two of the four health issues Three or more health issues No health issues	40 12 63 04 30 09 45	19.7 5.9 31.0 2.0 14.8 4.4 22.2	
Number of times being infected with covid			
Once Twice or more	185 18	91.1 8.9	
Compared to before being infected with covid, I now feel more fatigued/tired			
Strongly disagree Disagree Neither agree nor disagree Agree Strongly agree	06 20 21 116 40	3.0 9.9 10.3 57.1 19.7	
Compared to before being infected with covid, I now frequently experience chest pain			

Strongly disagree Disagree Neither agree nor disagree Agree Strongly agree	19 41 25 91 27	9.4 20.2 12.3 44.8 13.3	
Ever since I tested positive for covid, I feel more isolated from others			
Strongly disagree Disagree Neither agree nor disagree Agree Strongly agree	31 36 19 93 24	15.3 17.7 9.4 45.8 11.8	
Level of Wellbeing			
Very poor Poor Average Good Very good	07 66 85 24 21	3.4 32.5 41.9 11.8 10.3	12.72 (1) (25)

Table 2- Kruskal Wallis Test-Wellbeing (N = 203)

Gender					
Male	**N**	**Mean rank**	**χ2**	**df**	**p value**
	78	115.85	7.08	1	0.008**
Female	125	93.36			
Health issues at the time of being infected with covid					
High blood pressure	40	93.33	20.24	6	0.003**
Cardiovascular Problems	12	76.79			
Diabetes	63	91.63			
Cancer	4	76.13			
Two or more health issues	30	108.93			
Three or more health issues	9	79.78			
No health issues	45	133.08			
Compared to before being infected with covid, I now feel more fatigued/tired					
Strongly disagree	6	136.75	33.52	4	0.000***
Disagree	20	153.35			
Neither agree nor disagree	21	138.31			
Agree	116	91.13			
Strongly agree	40	83.56			
Compared to before being infected with covid, I now frequently experience chest pain					
Strongly disagree	19	161.13	45.01	4	0.000***
Disagree	41	133.18			
Neither agree nor disagree	25	96.94			
Agree	91	85.70			
Strongly agree	27	72.65			

Ever since I tested positive for covid, I feel more isolated from others					
Strongly agree	31	155.23	46.92	4	0.000***
Disagree	36	123.26			
Neither agree nor disagree	19	103.87			
Agree	93	84.51			
Strongly disagree	24	67.65			

*** Statistically significant at a very high level ($p<0.001$)

** Statistically significant at a high level ($p<0.01$)