# **Original Research Article**

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# Impact of social isolation during COVID-19 on psychological well-being of the elderly: an Indian survey-based study

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# **ABSTRACT**

**Background:** Since the onset of COVID-19 pandemic the elderly population has started experiencing higher levels of anxiety both because of fear of contracting infection and due to restricted social life. Study was done to assess impact of lockdown on mental health of elderly.

**Methods:** This was a retrospective and observational study. 106 participants were enrolled aged above 60 years. A Google survey form was sent to the participants for filling, accompanied by sessions with a clinical psychologist. The socio-demographic data and various psychological parameters were assessed.

**Results:** Depression was most commonly reported (39.6%). Global satisfaction had a significant and positive correlation with both social security index (p=0.004) and social network scale (p=0.000).

**Conclusions:** The prevalence of anxiety, stress and depression increased during lockdown. Overall satisfaction with life was reduced. Psychological counselling and support should be readily available to elderly. The problem associated with social isolation and lockdown may seem to be acute but can have worse psychological outcomes in long term.

Keywords: COVID-19, Elderly, Emotional distress, Impact, Pandemic

#### INTRODUCTION

The world's healthcare system is facing one of greatest challenges of this decade, the COVID-19 pandemic. In order to contain and limit the spread of infection, on 21st of March the Indian government declared a nationwide

lockdown. The implementation of lockdown affected both mental and social wellbeing of all subsets of population. The elderly population is one such subset and presence of co-morbid conditions makes them more susceptible to the SARS-CoV-2.

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A report from the Chinese centre for disease control and prevention (CDC) states that 31-59% of elderly people are infected with corona virus; 4-11% of these suffer mortality. Since the onset of COVID-19 pandemic they have started experiencing higher levels of anxiety both because of fear of contracting infection and due to restricted social life. The elderly are thus facing the challenge of the disease both physically and mentally coupled with lack of family support and dependence on caregivers. It is a known fact that lack of social contact6and isolation affects an individual's mental health and emotional well-being.

The implementation of strict norms of lockdown and social isolation also limited the availability of medical services to the elderly. Inability to maintain a good health condition under might lead to exacerbation of prior medical and psychiatric problems. The related psychological problems are perceived stress, emotional distress, anxiety and depression. So far only few studies have explored the impact of COVID-19 pandemic on mental health of elderly. Thus, present study was planned to explore the impact of lockdown during COVID-19 pandemic and its psychosocial correlates.

### **Objectives**

The objectives were to assess impact of lockdown on mental health of elderly during COVID-19, to assess the impact of social isolation on social network and life satisfaction, to assess emotional distress, loneliness and social support perceived by elderly during lockdown.

# **METHODS**

This was a retrospective study conducted from months of July-September 2020 after the lockdown period (25 March 2020 to 31 May 2020) at post graduate institute of medical science, Chandigarh after obtaining ethical clearance from the institutional ethical committee. A total of 106 elderly people of either gender, above 60 years of age from Chandigarh, India were enrolled. Sampling was done by multistage stratified random sampling technique. In urban area study population was approached through resident's welfare association and retired welfare association and from rural they were approached through sub centres of respective areas. The confidentiality and anonymity of the participants was maintained throughout the study. Digital informed consent was taken from them and thereafter assessment was done. Participants were approached telephonically and Google forms were sent through emails and whatsapp services. After taking verbal and electronic consent, online survey (Google form) was conducted by taking socio demographic details included the identification of the participant (name, age, gender); his/her demographic details including education, work profile, income, type and size of family, religion, availability of caregiver. Psychological problems were assessed by the following tools like depression anxiety and stress scale, De Jong Gierveld loneliness scale,

Lubben social network scale, emotional distress-anxietyshort form, life satisfaction scale and Duke's social security index among targeted population. The telephonic contact and assessment was supervised by a trained clinical psychologist (holding a PhD in psychology, with working experience in the institute). The cultural validity of the tools was assessed by translation of the questionnaire into Hindi and then back translation was conducted by two bilingual experts and two psychologists. Face validity of the translated version was assessed by experts. No participant was contacted personally; any difficulties encountered during filling the survey form were resolved telephonically by the supervising clinical psychologist. The psychological assessment was spread over two or three sessions as per convenience of the participants. None of the participants had any sensory impairment.

# Psychological tools

#### DASS 218

This scale was used to measure distress along three axes of stress, anxiety and depression. It had 21 items (7 items for each axes) rated from 0 to 3(0=did not apply to me at all, 1=applied to me sometimes, 3=applied to me most of the times). Total score for each subscale ranges from 0-21.

#### De Jong Gierveld loneliness scale (short version)9

The present scale measured the social and emotional loneliness of individuals. Scores are rates on 5 point likert scale (1 strongly agree to 5 strongly disagree) and higher scores on the scale indicating higher loneliness (range=3-9).

# Lubben social network scale (LSNS)<sup>10,11</sup>

It was a 6 item scale developed to measure social network. The total score ranged from 0 to 30 and was equally weighted sum of all six items. Total score less than 12 was termed as socially isolated and total score less than 6 in family and friends domain each signified marginal family and friendship ties.

# Emotional distress and anxiety (EDA)

This 6 item scale was used to assess emotional distress and anxiety during past one week. Items were rated on 5 point likert scale (1=never, 2=rarely, 3=sometimes, 4=often, 5=always). Total score ranged from 7 to 35.

# Satisfaction with life

This 5 item scale was used to measures subjective well-being of individual's life satisfaction. Items of the scale were rated on a 7 point likert scale (1=strongly disagree to 7=strongly agree).<sup>1</sup>

#### Duke's social support index (SSI)

It used the two sub-scales, social interaction and satisfaction with social support (subjective support). A score for Duke social support index is calculated as the sum of 11 items with mean imputation for up to two missing items.

### Statistical analysis

The recorded data was transferred on excel database and analyzed by using SPSS statistic 17 (IBM SPSS statistics, New York, United States). Descriptive statistics were used to compute frequency percentages, mean, standard deviation for different variables. Bivariate co-relation was also computed and used for analyses of the association between clinical and socio-demographic variables. Pearson's correlation was used to see association between various psychological tools. Student t test (age, gender, job, religion) and Chi square test was used to find relation between other descriptive variables and psychological tools used. Further ANOVA test was used to find association where there were two subgroups and post-hoc analysis was applied where there were three or more categories. In order to estimate the effect of some explanatory variable on the dependent variable, multiple regression analysis was used. A p value of <0.05 was considered significant.

#### **RESULTS**

In the present study, the targeted population was approached through residents welfare association and retired welfare association in urban areas and from rural they were approached through sub centres of respective areas of Chandigarh. Google forms were sent to 250 elderly persons of either gender, above 60 years of age, out of them 106 responded. Response rate for the present study was 42.4%. Thus final sample comprised of 106 participants. The demographic data, sex distribution, educational qualification, income status, family type, locality, religion, social security and working status were all recorded. Mean age of participants was 69.21±5.16 (in years). Among participants 47 (44.3%) were males and 59 (55.7%) were females, about than half of study population 50 (47.2%) attained graduation level education and 40 (37.8%) were educated up to intermediate level, majority of them were living in their own houses 75 (70.8%) in joint families (85%), (79.2%) residing in urban areas and (75.5%) belonged to Hindu community. Slightly more than half of the participants were selfdependent 59 (55.7%) and were dependent on their children 43 (40.6%), 40 (37.7%) were in retired from government jobs and had secured financial status (Table 1).

The results of various psychological parameters are shown as mean±SD with maximum and minimum values, skewness and kurtosis (Table 2). All the data had

acceptable skewness and kurtosis for descriptive variables.

The DASS 21 psychological assessment was based on the distribution of stress, anxiety and depression among the participants. Moderate degree of depression was fairly common within the population (39.6%), followed by moderate to severe degree of anxiety (28.6%). Most of the participants reported of only mild stress (34%). Therefore, depression was the most common problem encountered by the elderly population during lockdown in the present study. Mean scores on total loneliness scale was 4.53±1.53 and mean score on social loneliness (2.38±0.83) was comparatively higher than emotional loneliness (2.13±0.90). About 68.86% of the participants had a total score more than 4 out of which 47.91% had a score of 6 implying a significant proportion. Mean score on social engagement/social network was 11.95±6.11 and 70 (66.0%) of participants reported that they experienced social isolation from their family and friends during COVID-19 lockdown period. on distress and anxiety measure participant's mean score was 16.73±5.15. One third of participants exhibited moderate distress and anxiety (30.2%) and slightly more than one third (36.8%) reported mild distress and anxiety. On satisfaction with life mean score was observed as 21.19±6.55 and 29 (27.4%) reported satisfaction slightly below average, 33 (31.1%) were highly satisfied, whereas 17 (16.0%) reported dissatisfaction with life (Figure 1).

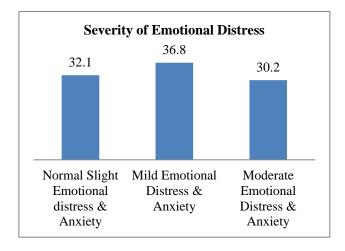


Figure 1: Histogram representing severity of emotional distress.

On social scale index scale mean score was  $18.00\pm4.28$  and participants mean score on social interaction (7.15±1.82) was comparatively less than on satisfaction with social support (10.84±3.10) and 73 (68.9%) reported below cut off ( $\leq$ 19.62) social support index.

# Correlations among descriptive variables

The first three variables of stress, anxiety and depression as studied by DASS 21 had significant associations. Depression had a positive and significant correlation with

anxiety, stress, loneliness and emotional distress. Depression had a positive correlation with both stress (p=0.00) and anxiety (p=0.00). The loneliness score had significant positive correlation with depression range (p=0.00). Depression also had positive correlation with the EDA score (p=0.001) and a negative correlation with level of satisfaction scale to a p value of 0.04. Therefore, we can say that those who reported depression mostly complained of anxiety and stress in a higher range, participants feeling depressed reported higher values on loneliness scale, were emotionally more distressed and experienced a lower satisfaction with life. Stress and anxiety had similar correlations with depression and each other and no significant correlation with other variables. For the emotional distress and anxiety scale as already stated a positive correlation was found with depression (p=0.001); similarly emotional distress was negatively correlated with social engagement (p=0.00) and life satisfaction (p=0.000). Thus, stating that more distress was experienced due to less social engagement, less social support increased emotional distressed and cumulatively reduced overall satisfaction with life. The significant negative correlation as mentioned between level of satisfaction and emotional distress depicts that more distress led to less satisfaction with life. Participants having high social engagement (p=0.000) and high score on social support (p=0.001) had higher satisfaction with life as depicted by their significant positive correlations between these variables (Table 3).

# Correlation with demographic and other clinical variables (Table 4)

Clinical variables like gender, job, religion, place and dependence on care giver were not significantly correlated with any of the psychological parameter studied. Participants aged 71-82 years exhibited lower level of satisfaction, more emotional distress and lesser social engagement in comparison to the participants aged 60-70 years. Level of satisfaction for 60-70 years was 22.04±6.18 for age 71- 82 years was 18.80±6.96. (p=0.057). Emotional distress had a significant negative association with increasing age participants aged 71-82 years reported more distress (mean=18.32±4.69; p=0.013) compared to those aged 60-70 years (mean=15.77±5.21). The social engagement score also had same pattern those with age 60-70 years, mean=12.84±6.07; with age 71- 82 years mean=10.47±5.96 (p=0.052).

Level of education also had significant correlations with following three parameters: level of satisfaction, emotional distress and social engagement. Highest level of satisfaction was reported in the post graduate group compared  $(mean=29.50\pm0.70)$ graduate  $(mean=23.70\pm5.84)$ and higher secondary (mean=18.57±6.15) the difference amongst the groups was found be significant with a p value of 0.000. Also participants of the post graduate group had lower emotional distress score (mean=7.50±0.70) compared with higher secondary (mean=17.94±4.46 and graduation (mean=15.80±5.42) and the comparison showed significant p value of 0.003. Social engagement score was also more in post graduate group of participants (mean=20.50a), higher secondary group has mean value of 10.62±6.38 and graduate group has a mean of 13.04±5.40; the difference among the three groups was found be significant with a p value of 0.017. In conclusion, we can state that participants who were educated up to post graduate group experienced higher level of satisfaction, low level of distress and were more socially engaged during COVID-19 pandemic lockdown; than participants who had attained graduate and higher level of education.

The family type was divided in two categories nuclear and joint family. Family type was also seen to affect level of satisfaction, emotional distress and social engagement. Participants living in nuclear families had higher level of satisfaction (mean=22.47±5.75) than joint families (mean=22.47±5.75) the difference in means was also found to be statistically significant (p=0.001). Elderly living in nuclear families reported less emotional distress (mean=13.19±4.87) than those part of joint families (mean=17.45±5.15) the comparison was statistically significant (p=0.001). Social engagement scores of participants part of nuclear families was more (mean=15.23±5.87) than those part of joint families (mean=11.50±6.10) the results were significant with a p value of 0.015. Therefore, elderly living in nuclear families experienced more satisfaction, less distress and more social engagement.

Level of satisfaction, emotional distress and social engagement were also had significant associations with place of living. Level of satisfaction was positively correlated in participants residing in own house  $(mean=22.30\pm6.96)$ than rented accommodation (mean=22.30±6.96, p=0.006). Emotional distress was less in participants living in own house (mean=15.62±5.29) those residing in rented accommodation (mean=19.41±3.66, p=0.001). Social engagement scores were more in people residing in their own houses (mean=12.98±6.669) than those residing in rented accommodation (mean=9.45±3.37; p=0.006). Participants living in their own houses reported higher satisfaction, lesser emotional distress and more social engagements than living in rented accommodations. Family income was also one of the parameters seen to significantly affect level of satisfaction, emotional distress and social support index. Level of satisfaction was reportedly lower in group with income  $\leq 26.354$ , (mean=17.00±3.64) and more in  $\geq$ 26,354 (mean=22.00±6.68; group with income p=0.003). Emotional distress experienced by participants of lower income group (\leq 26,354) was more (mean=19.17±2.60) than that experienced by participants of higher income group(≥ 26,354, mean=16.26± 5.39, p=0.033). Social support index was more in higher income mean= $15.47\pm2.50$ ; (≤26,354:  $\geq$ 26,354 mean=18.48±4.38; p=0.007) than lower income group with difference being statistically significant. High

income was found to be significantly associated with level of satisfaction, emotional distress and social engagement. Participants whose family income was higher experienced higher level of satisfaction, low level

of distress and were more socially engaged during COVID-19 pandemic lockdown than participants who had comparatively less income.

Table 1: Demographic and clinical details of the participants enrolled for the study.

Parameters	Categories	Number (percentage)		
Age (parents in years)	60-82	69.17±5.18		
Gender	Male	47 (44.3)		
Gender	Female	59 (55.7)		
	Middle	54 (17.47)		
Education	Graduation	60 (56.6)		
	Post-graduation	2 (18.86)		
Family income (in rupees)	<26,354	17 (16.03)		
ranny meome (m rupees)	>26,354	89 (83.96)		
Family type	Nuclear	21 (19.8)		
Family type	Joint	85 (80.2)		
Locality	Urban	84 (79.2)		
	Rural	22 (20.8)		
Religion	Hindu	80 (75.5)		
	Other	20 (15.5)		
	Self-dependent	59 (55.7)		
Social security	Dependent on children	43 (40.6)		
	Dependent on caretaker	4 (3.8)		
Place of stay	Own house	75 (70.8)		
riace of stay	Rented house	31 (29.2)		
Covernmentich	Yes	40 (37.7)		
Government job	No	66 (62.3)		

Table 2: Scores of participants on clinical measures (DASS, loneliness scale, social network scale, emotional distress and anxiety scale, satisfaction with life scale and social support index).

Parameters	Minimum	Maximumm	Mean	SD	Skewness	Kurtosis		
DASS								
Stress	0.00	34.00	16.90	7.83	-0.171	-0.270		
Anxiety	0.00	32.00	14.92	7.03	0.133	0.009		
Depression	0.00	36.00	16.03	8.46	-0.163	-0.416		
Loneliness scale								
Emotional loneliness	0.00	3.00	2.13	0.90	-0.736	-0.380		
Social loneliness	0.00	3.00	2.38	0.83	-1.135	0.283		
Total loneliness scores	0.00	6.00	4.51	1.53	-0.992	0.133		
Social network scale		-	-					
Social engagement scores	2.00	30.00	11.95	6.11	0.814	-0.034		
Emotional distress and anxiety scores	7.00	27.00	16.73	5.15	-0.453	-0.652		
Satisfaction with life scores	8.00	35.00	21.19	6.55	0.197	-0.902		
Social support index								
Social interaction	4.00	13.00	7.15	1.82	0.980	1.460		
Satisfaction with social support	6.00	18.00	10.84	3.10	0.761	0.119		
Total social support index scores	11.00	31.00	18.00	4.28	0.771	0.425		

Table 3: Association between different clinical variables.

Association	Level of satisfaction	Emotional distress	Social engagement	Stress	Anxiety	Depression	Social support index
Level of satisfaction	1	-0.666** (0.000)	0.693** (0.000)				0.309** (0.001)
Emotional distress		1	-0.520** (0.000)	0.235* (0.015)		0.309** (0.001)	-0.228* (0.019)
Loneliness						0.254** (0.009)	
Stress				1	0.862** (0.000)	0.813** (0.000)	
Anxiety					1	0.794** (0.000)	

Note: significant correlation among different descriptive variables represented as \*\*; test applied Pearson correlation coefficient's <0.005 is significant.

Table 4: Association among socio demographic and clinical variables.

Association	Level of satisfaction	<b>Emotional distress</b>	Social engagement	Social support index
Age	-0.249* (0.010)	0.293** (0.002)	-0.279** (0.004)	-
Education	0.427** (0.000)	-0.287** (0.003)	0.256** (0.008)	-
Family type	-0.390** (0.000)	0.317** (0.000)	-0.291** (0.002)	-
Religion	-	-	-0.197* (0.003)	-
Place of Residence	-0.264** (0.006)	0.336** (0.000)	-0.264** (0.006)	-
Family income	0.281** (0.003)	0.208* (0.033)	-	0.259** (0.007)

Note: significant correlation represented as \*\*.

Table 5: Summary of regression analysis for predicting level of satisfaction.

Model R R square		Adinated	Std. error	Change statistics						
	R	R square	Adjusted R square	of the estimate	R square change	F change	df1	df2	F	Sig. F change
1	0.693a	0.480	0.475	4.74659	0.480	95.948	1	104	95.948	0.000
2	0.730b	0.533	0.524	4.51932	0.053	11.723	1	103	58.782	0.001

a predictors: (constant), total social engagement scores; b predictors: (constant), total social engagement scores, total SSI.

# Regression analysis

The Table 5 shows the regression analysis for the level of satisfaction as criterion variable (dependent variable) and social engagement and social interaction as predictor (independent variables). The adjusted R square (0.524) which was fairly near to R square (0.533) shows that the result represents the population parameter to satisfactory level. The regression equation shows two variables to be relevant predictor of level of satisfaction namely social engagement and social interaction (Table 5).

#### **DISCUSSION**

The early research on mental health of elderly during COVID-19 pandemic called for a more comprehensive research on the psychological impact of rigorous lockdowns and social isolation. In initial part of the pandemic, Baneerji laid emphasis on vulnerability of ageism and impact of pandemic on elderly mental health and well-being.<sup>13</sup> He stressed upon the psychological

impact of quarantine and loneliness on elderly and rise in incidence of depressive disorder, PTSD and suicidal ideation. Mehra et al through two case studies expressed that social disconnectedness, media coverage on COVID-19 pandemic raised the alarm of anxiety among elderly and those who have history of psychiatric disorders are at higher risk of relapse. <sup>14</sup> Therefore, we conducted this study and found in the results of our study, that the initial statements made regarding vulnerability of the elderly population stand absolutely true.

It is well known that mortality rate was more among the elderly suffering with COVID-19.<sup>15</sup> The presence of comorbid condition further made them at risk of developing a more severe form of the disease. These factors have led to greater stress and anxiety in the vulnerable elderly population. Ageism and fear of being neglected was also a contributing factor towards increased stress, anxiety and depression.<sup>13</sup> Various studies had used the validated DASS 21 for assessment of the psychological impact during COVID-19 lockdown. The present study also

reported a high incidence of these psychological problems, 39.6% of individuals faced depression and 34% reported moderate stress and anxiety in 28.6%. The findings correlated well with the evidence in literature as reported by Meng et al in 2020 in a questionnaire-based study, 37.1% of the elderly faced depression and anxiety. 16 A cross sectional survey based study conducted on the Indian population used the DASS 21 questionnaire to assess psychological impact of COVID-19, this study also reported similar findings to the present study.<sup>17</sup> The percentage of the respondents who reported stress was 35.5%, anxiety 32% and depression, 34.7%. These numbers closely approximate to that found in the present study. A recent review article on the effects of social isolation on mental and physical health of the elderly population included 41 documents from continents like Asia, Europe and America.<sup>18</sup> Majority of the research papers quoted in this review similarly found that depression and anxiety were fairly more common in the elderly during the COVID-19 pandemic. In the present study a significant proportion of the participants, 68.86% of the participants had a total loneliness score more than 4 out of which 47.91% had a score of 6. A recent study based on the US population found that the perceived loneliness steadily increased during three months of lockdown although the rise was slower during later months.<sup>19</sup> The study also stated that high loneliness scores were positively correlated with depression as in the present study. Staying at home and social isolation led to this increased loneliness in people.

The second important finding was that participants with a high score on the EDA scale were experiencing more stress, and anxiety and depression. The three measures of DASS 21 positively correlated to EDA scores, with depression range showing significant positive correlation. This was simple to understand as the EDA questionnaire contained questions pertaining to feeling of worry, fear, nervousness and tension. Participants having anxiety, depression and stress were more likely to perceive these negative feelings. Thus, participants having high DASS 21 score propionate had high EDA scores as well.

As already mentioned satisfaction with life scale included only five items, but it had demonstrated good psychometric characteristics.<sup>20</sup> Since its introduction, the SWLS had been used in numerous studies to assess the life satisfaction component of SWB. In the present study we used this scale to assess the global satisfaction with life of the elderly population during COVID-19 pandemic and also studied factors influencing it. The results of our study were well supported by literature. A study conducted on health care workers stated that depression, stress and anxiety were major determinants of satisfaction with life. Another study conducted on adolescent students clearly indicated that, life satisfaction was negatively and significantly correlated with the scores from depression, anxiety and hopelessness scales.<sup>21,22</sup> We also found similar results in our study as the EDA scores were negatively correlated with SWLS score. In conclusion we stated that participants experiencing more of negative feelings (fear, stress, anxiety and nervousness) had reduced satisfaction with life.

Participants having high social engagement and high score on social support reported more satisfaction with life. The strict laws of social isolation and lockdown were associated with a marked decreased in the social contact with friends and family. The elderly population under study was more vulnerable to negative effects of such isolation as they have limited social activities like meeting in parks, evening walks or grocery shopping. Due to curtailment of their social activities and lack of social support system (family, friends, neighbors) they may find themselves completely lonely and this can trigger psychological problems among them. Secondly, the older generation may not be able to adapt to the recent changes in lifestyle like use of mobiles, laptop, mobile applications thus feeling socially more disconnected unlike the younger generation. The positive correlations seen between the social network and social security index scales and satisfaction with life has clearly reflected this adverse impact among the elderly. The same finding s reported in a large multicentre study which included population from various continents around the globe, including Asia.<sup>23</sup> The findings revealed that people experienced psychosocial strain during the enforced COVID-19 home confinement. A large decrease in the amount of social activity through friends/neighbours or entertainment was triggered by the enforced confinement. These negative effects on social participation were also associated with lower life satisfaction during the confinement period.

In the present study the participants aged between 70-82 years experienced more emotional distress, lower satisfaction with life and less social engagement, it was already stated in literature that the elderly were at high risk of developing psychological problems due to isolation. <sup>13</sup> Participants in this age group exhibited more of these problems as they may already be suffering from co-morbities. Also their coping up ability with social disconnectedness and isolation was less compared to people of the lesser age group due to accompanied cognitive decline.

Level of education was seen to influence the coping ability during COVID-19 lockdown; this was demonstrated in a study conducted during early part of the pandemic in China where the subset experiencing more distress reportedly had less education and lower family income. <sup>24</sup> The similar result was present in our study where participants educated upto post-graduation level had more level of satisfaction, social engagement and lower emotional distress and anxiety score. The economic crisis coupled with COVID-19 pandemic and lockdown also made the economically weaker section more vulnerable to psychological impact; the participants earning lower income faced more emotional distress and anxiety and had lower satisfaction with life. Family

income similarly influenced these three mentioned psychological parameters. In India where majority of the population earned income by daily wages and small-scale companies, these people were adversely affected by sudden implementation of lockdown and isolation.<sup>25</sup> Participants living in their own houses also experienced more satisfaction with life and less distress, this can attributed to the fact living in own house gave them both social and financial security.

People living in nuclear families were more satisfied, less distressed and more socially engagement, this a controversial to the present literature which stated that elderly living in joint families could seek help and care from other members.<sup>13</sup> The social isolation and strict home confinement, families faced stress in form of loss of income, increased domestic work, providing care to the elderly and children, managing situations like work from home accompanied with the fear of contracting COVID-19. More number of family members led to less division of work and more stress therefore, more psychological impact.

#### Limitations

The foremost limitation was that sample size of the study was small. Secondly, we could not separately mention any participants having co-morbid conditions as they were likely to experience more psychological stress this could result in a bias in the outcome. Thirdly, we did not grade or compare the psychological problems faced by individuals in the pre-COVID era; this would have more clearly delineated the exacerbation experienced due to lockdown and social isolation.

# CONCLUSION

The elderly population is extremely vulnerable to the impact of social isolation and strict home confinement. The main problems experienced are of anxiety, stress and depression with decreased overall satisfaction with life. Therefore, the health care system should address all their needs at the earliest and provide them with psychological counselling and basic medical health facilities at their doorstep.

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Institutional Ethics Committee

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