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Psycho-social and behavioral impact of COVID-19 on middle-aged and elderly individuals: A qualitative study

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Abstract:

BACKGROUND: COVID-19 may seem to have an impact on middle-aged and elderly people. However, not much is known about the lived experiences of middle-aged and elderly people during this pandemic. The study aims to explore psychosocial and behavioral impact of COVID-19 on the lives of these individuals.

MATERIALS AND METHODS: Three focus group discussions and seven in-depth interviews were conducted. A format to guide discussions and interviews was made to bring uniformity across groups and participants. Participants were recruited through purposive and snowball sampling techniques. Discussions were recorded and transcribed verbatim. Thematic analysis method was used to extract key conceptual themes.

RESULTS: There were 12 male and 10 female participants included, with a mean age of 62.2 years. Five subcategories identified were: Fear and anxiety, household confinement, lifestyle modification, preventive practices, and coping strategies. These sub-categories formed three major categories-psychological, social, and behavioral which ultimately led to the emergence of the main theme that is, COVID-19 effects on the life of middle-aged and older individuals.

CONCLUSION: Middle-aged and elderly people are affected in many ways due to COVID-19. Addressing the psycho-social and behavioral problems can help in the better adjustment to tide over the pandemic.

Keywords:

COVID 19, focus group discussions, focused group discussions, psycho-social behavioral functioning, qualitative research

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Introduction

COVID-19 is an unprecedented public health problem that has been affecting all sections of the society. However, people in the older age-group who have one or more comorbidities are at a higher risk of developing serious complications after contracting this disease.^[1,2] In India, due to COVID 19, 76.7% of the total deaths have occurred in the age group of 50 years and above.^[3]

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Preventive measures such as social distancing and self-isolation have been identified as effective strategies to mitigate and control the spread of the disease.^[4] These preventive measures may have adverse effects on senior citizens whose major social contact is outside home such as meeting friends, attending family functions, religious ceremonies and places of worship, and involved in some kind of recreational activities and other group activities.^[5] General public, especially middle-aged and elderly people have been appealed to avoid going out of the house

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due to a high risk of mortality. Falling in the vulnerable age group and bound by the containment measures, social and behavioral functioning of middle-aged and elderly individuals is affected by the current pandemic.^[6]

There is a dearth of scientific studies about the lived experience of middle-aged and elderly people during this pandemic period. This calls for a need to address the psychosocial and behavioral impact that COVID-19 might have on the lives of people of this age group. In order to have detailed insights into the psycho-social and behavioral impact of COVID-19, it is useful to carry out qualitative research as it will not only help to focus on “what” but also on “how” and “why.”^[7] Therefore, this study was done using qualitative research methodology to capture the lived experiences of middle-aged and elderly people during COVID-19 pandemic.

Materials and Methods

The data regarding the psycho-social and behavioral impact of COVID 19 on elderly people was collected through the qualitative thematic analysis using the conventional approach, i.e., focus group discussions (FGDs) and in-depth interviews. This method was adopted to obtain themes based on experiential accounts from the middle-aged and elderly individuals. The study was conducted in September 2020. This study was conducted according to the guidelines laid down in the Declaration of Helsinki and all procedures involving human subjects/patients were approved by the All India Institute of Medical Sciences, New Delhi (permission number IEC/689/6/2020). Consent was taken from the participants before enrolling them in the study. Confidentiality of the data and anonymity of the participants was maintained.

Ethical standards disclosure

This study was conducted according to the guidelines laid down in the Declaration of Helsinki and all procedures involving human subjects/patients were approved by the All India Institute of Medical Sciences, New Delhi. Written informed consent was obtained from all subjects/patients. In cases where the interviewer was filling the Google Form, verbal consent was taken before enrollment.

Purposive and snowball sampling methods were employed for recruitment of the participants. The purpose of the study was informed to various interested individuals. They were even asked to introduce other people also whose presence might prove to be useful. All interested individuals, aged 50 years and above, who could understand and speak either English or Hindi language were then invited to participate in the

discussions. Individuals of different ages and gender were recruited to capture diverse experiences. However, the group composition was kept homogenous.

The purpose of the study was explained to all participants. Participants were informed that discussion would be audio recorded. They were also assured of the confidentiality and anonymity. Verbal consent was then obtained from all the participants before the commencement of the discussion. Three FGDs constituting five participants in each were conducted by the primary investigator via an online platform. Each session lasted for about 45–50 min. Apart from this, seven in-depth interviews were also carried out over the telephone, each session lasting for about 20–25 min. FGD/interview moderator guide was constructed to address the objective of the study [Table 1]. Discussion and interviews were initiated by an open-ended question followed by another set of questions to direct and keep the participants focused on the purpose of the study. At the end of the discussion, participants were encouraged to include additional information, if any. Each session was audio recorded along with note tracking of FGDs and interviews.

Recordings obtained from FGDs and interviews were transcribed verbatim after the removal of all personally identifiable information. Thereafter, the data was analyzed using thematic analysis. Inductive thematic technique was used to analyze the data. In the first step, researchers read through the text line by line to get familiarized with the data and to generate initial codes. These codes were then sorted into potential themes. These steps were done independently by two researchers to ensure reliability.^[8]

Table 1: Focus group discussions/interviews moderator guide

First question	What important changes have you experienced in your lives due to COVID 19?
Guiding questions	How has your social life (meeting friends, family members, attending social gatherings, religious ceremonies, etc..) got affected due to COVID-19?
	Describe the kind of relationship you share with your family members staying with you during COVID-19
	What precautions are you taking to prevent yourself from getting infected by COVID?
	Highlight any changes that you have experienced in your lifestyle related to diet, physical activity, and sleep
	What has been your experience regarding availability of health-care services?
	What all difficulties in your routine are you facing due to COVID-19?
	How do you spend your day to overcome the thought of COVID-19?

Results

Sociodemographic characteristics

Twenty-two individuals participated in our study, out of which 12 were male and 10 were female. The average age of the participants was 62.18 ± 6.56 (mean \pm standard deviation) years. Participants comprised five working, eight retired, and nine homemakers [Table 2].

Impact of COVID 19

The analysis of the impact of COVID-19 on the lives of middle-aged and elderly people generated various codes that could be grouped into five subcategories: fear and anxiety, household confinement, lifestyle modification, preventive practices, and coping strategies. These

subcategories were further combined to form three major categories - psychological, social, and behavioral which ultimately led to the emergence of the main theme that is mentioned in Table 3.

Fear and anxiety

When asked about the important changes that one has been experiencing due to COVID, the participants majorly reported that this disease has led to the sense of fear. Being an unprecedented disease, participants expressed that there is lack of appropriate information about this which has led to the confusion among people. The participants stated that they do not know what exactly should be done to prevent themselves from this disease. They have a fear of getting infected with

Table 2: Characteristics of participants (n=22)

Method	Participants	Age (years)	Gender	Current occupation status
FGD-1	P1	65	Male	Retired
	P2	62	Male	Retired
	P3	67	Male	Retired
	P4	66	Male	Retired
	P5	71	Male	Retired
FGD-2	P1	57	Male	Doctor
	P2	54	Male	Doctor
	P3	55	Female	Doctor
	P4	59	Female	Homemaker
	P5	53	Female	Homemaker
FGD-3	P1	74	Male	Retired
	P2	71	Female	Homemaker
	P3	52	Female	Homemaker
	P4	67	Female	Homemaker
	P5	61	Male	Retired
In-depth interviews	P1	69	Female	Homemaker
	P2	59	Female	Homemaker
	P3	63	Female	Homemaker
	P4	58	Male	Businessman
	P5	53	Male	Advocate
	P6	68	Male	Retired
	P7	64	Female	Homemaker

Table 3: Summary of codes, subcategories, categories, and theme emerged from qualitative analysis

Theme	COVID 19 effects on the life of elderly				
	Psychological	Social	Lifestyle modification	Behavioural	
Sub-category	Fear and anxiety	Household confinement		Preventive practices	Coping strategies
Code	Fear of getting infected with COVID 19	Social boycott	Eating healthy food	Hand and Personal hygiene	Spending quality time with family
	Fear of the fact that senior citizens are more vulnerable to COVID	Inability to meet friends	Avoiding junk food from outside	Use of masks	Usage of social media
	Concerned about family members	Inability to attend social gatherings	Inclusion of Immunity-boosting foods	Social distancing	Indulgence in hobbies
	Fear of going out of the house	Inability to attend religious ceremonies	Physical activity routine	Precautions regarding grocery shopping	
	Confusion about unprecedented COVID disease	Inability to visit doctors/people	Sleeping patterns		

coronavirus and are also concerned for their family members.

A 62-year-old male participant said: "The most important change is a sense of fear being experienced by senior citizens who have already been suffering from other comorbidities like blood pressure, heart problems and diabetes....."

A 61-year-old male participant noted: "The fear of getting infected has led to so much anxiety and stress that even if suffering from mild cold and cough it seems we might have got infected with coronavirus."

A 66-year-old male participant expressed his anxiety saying that: "...I get negativity while watching COVID news. Cases are increasing....Earlier, it was being said that COVID will disappear during summers. This has become an endless story and we do not know whether it will get over or not....Some doctors say that it is a life-threatening illness while others say that it is a mild disease. This confusion has increased our anxiety and fear."

A 69-year-old female participant expressed her concern in such a way: "...I am anxious and concerned for my children. They go out for work and I wish they stay safe from this disease."

A 55-year-old female participant said: "Being a doctor it is my duty..... My family members have always been worried for me as and when I moved out for my duty."

Household confinement

Various codes such as social boycott, inability to meet friends, inability to attend social gatherings, religious ceremonies, and inability to visit doctors/people depicted the household confinement aspect expressed by the participants. Many participants expressed distress due to the home confinement whereas only a few participants were not affected by this as such.

A 63-year-old female participant said: Getting socially boycotted is a big social problem now-a-days. We are unable to meet our neighbours, our friends....."

A 68-year-old male participant further supplemented by stating that: "...I cannot step out of my gate to meet anyone, I cannot go out to attend any functions, weddings. Moreover, neither could I go for the Rakshabandhan festival nor my relatives came to my place.... Earlier I used to go to the temple everyday but now that has also stopped."

A 59-year-old female participant expressed her grief stating that: "I had a routine of morning walk and yoga sessions in our community park. But now I am

unable to go out and have to do physical activity in my home."

A 67-year-old male participant said: "...My son does not allow me to go out of the house....My son does not allow me to go to my shop for business."

A 71-year-old female participant opined: "I have not got much affected in this aspect. Earlier also I used to stay at home only and now also it is more or less the same."

Lifestyle modifications

Participants reported that they have undergone certain lifestyle modifications including changes in diet, physical activity and sleep in view of this pandemic. Majority of the participants reported that they are consuming a healthy diet. However, for physical activity there was mixed responses wherein some participants indicated that they are still active whereas others reported slackness in performing physical activity. Apart from this, participants also reported disturbed sleep patterns.

A 67-year-old female participant referring to the dietary aspect stated: "We are drinking warm water every 2-3 h. We are also drinking kadha made out of tulsi, ginger and cloves."

A 52-year-old female participant added by saying that: "...We are also having citrus fruits and green vegetables. I also prepare amla juice in which along with amlas I add bottle gourd, mint leaves, tulsi, ginger, cloves and cinnamon. I also give turmeric milk to all my family members. We are also making sure to have dry fruits, pulses etc....."

A 71-year-old male participant in relation to physical activity said: "I used to go out and walk before COVID but now I do walking and some breathing exercises in my home."

A 59-year-old female participant said: "...I am not calling any of my household help so I am doing household chores by myself. This is my activity routine."

A 53-year-old male participant commented: "...There is slackness in my routine. I had a regular physical activity before COVID but since the last 5-6 months I have not done any physical activity...."

A 65-year-old male participant said: "...I stay at home and do yoga but my activity level is lower as compared to pre-COVID period. I am not satisfied with my current physical activity routine."

A 66-year-old male participant referring to sleep patterns said: "...I have started sleeping in daytime also due to which I sleep late at night...."

A 53-year-old male participant supported by saying that: "I am too facing disturbed sleep pattern as I wake up late in the morning and also take a nap in the afternoon due to which I sleep late at night."

A 53-year-old female participant contradicted by stating that: "I have not experienced any changes in my sleep patterns. It is the same as it used to be in pre-COVID times."

Preventive practices

Participants had been following various preventive practices during COVID-19 depicted through terms such as frequent hand washing/sanitizing, use of masks and maintaining social distance. Participants carried on reporting that they purchased 1–2-week worth of groceries at a time, kept groceries out for 72 h and thoroughly washed groceries before use. They also made sure to change their clothes and take a bath after returning home.

A 58-year-old male participant said: "Whenever I go out I always wear a mask, carry a hand sanitizer with me, sanitize my hands as and when I touch anything, maintain social distance from others."

A 57-year old male participant said: "I wear masks while going out to purchase groceries. After returning home I change my clothes and take a bath. We keep groceries out on our balcony for around 72 h....We purchase 12 weeks worth of grocery at a time...."

A 59-year-old female participant added by saying that: "...I also add vinegar and soda in water and dip my vegetables for approximately an hour."

A 54-year-male participant commented that: "Being a doctor I follow all preventive measures so that I can preach the same to my patients and other people."

Coping strategies

Participants were asked how they were spending time to overcome COVID associated stress and fear. Participants reported that they are spending time with family members, watching television, staying active on WhatsApp and indulging in their hobbies.

A 67-year-old male participant said: "I have two grandchildren. I spend my time with them, teach them, play indoor games with them...."

A 64-year-old female participant said: "I stay active on WhatsApp where I have family groups and friend groups. I watch television also....I have also joined the "Happiness program" where I learn meditation."

A 74-year-old male participant said: "I had a hobby of reading books. I enjoy my time reading many old books that I have."

Discussion

The study explored the impact of COVID 19 and its containment measurements on the lives of middle-aged and elderly people. Based on the results, the key findings point out that COVID 19 has psycho-social and behavioral impact on these people. First, these individuals have a sense of fear and anxiety. Second, there has been a social boycott and they have been subjected to home confinement. Third, they are experiencing a lifestyle-related behavioral change.

There was a sense of fear and anxiety that was being experienced by these individuals. Being from vulnerable age group has instilled a sense of fear in them of going out of the house and getting infected with this contagious disease. They also expressed worry for their family members going out of the house for work. Moreover, unavailability of clear and precise information about this unprecedented virus has increased uncertainty of the disease status, leading to more stress. De Leo and Trabucchi^[9] also reported that senior citizens have a greater fear of contracting this disease owing to the thought that COVID-19 is affecting people of advanced age groups much more than other age groups. Another study also reported that uncertainty and misinformation can affect mental health especially of elderly people.^[10]

In addition to this, COVID-19 has upended the social life of these people. Usually, elderly people have social contact outside home such as spending time with neighbors and friends, indulging in group exercises and visiting places of worship.^[5] However, being a high risk population group, they have to be home-ridden during this COVID-19 outbreak. Aung *et al.*^[11] urged for health promotion practices owing to the challenge being posed on social life of elderly due to forced confinement.

COVID-19 and its containment measures have affected the lifestyle-related behavior of people.^[12] Increased awareness related to diet has been witnessed among middle aged and elderly people wherein they have been consuming a healthy diet including whole grains, nuts, fruits, and vegetables as guided by the Food and Agriculture Organization^[13] and incorporating immunity-boosting foods in their daily diet. Our findings are concurrent with the study by Rodríguez-Pérez *et al.*^[14] reporting that people in the mid-life age group were consuming a healthier diet during this pandemic. Apart from this, our study depicted that the overall physical activity level has declined owing to home confinement. A study by Giustino *et al.*^[15] also reported that home

confinement and quarantine had negatively affected the physical activity of senior citizens. Moreover, our study reported a disturbed daily routine due to which sleep-wake rhythms have also got affected. People are going to bed later, waking up late, taking mid-day naps, and sleeping more than usual. However, a study by Emerson, received mixed responses, some reported sleeping more than usual while others reported they were sleeping less than usual. Sleeping less might be because of stress and a sense of loneliness.^[16]

In addition, COVID-19 preventive measures have led to the behavioral change among middle aged and elderly as they now resort to frequent hand washing/sanitizing; use of masks has become a new normal for them and whenever they step out of their house they maintain social distance. They have become more aware of grocery handling. These findings are similar to a study where majority elderly participants adhered to physical distancing norms as they did not meet their friends and relatives in person, did not attend any celebrations, reduced the number of trips to grocery stores, cancelled out of town trips and doctor appointments.^[17] Another study also reported that elderly people acknowledged the need and significance of hand washing, social distancing, and disinfecting.^[18]

Apart from this, elderly people have been trying to overcome the stress and anxiety associated with COVID-19. They have been spending time with other family members, engaging in social media, attending some online wellness programs or indulging in their hobbies. Our findings are concurrent with the results of the previous study reporting that elderly people have a high level of social media engagement to stay in touch with their friends and family members and they invested time in their hobbies to concentrate on various aspects of life other than this COVID pandemic.^[18] A similar study on pregnant ladies have found that psychosocial and behavioral functioning of pregnant ladies were affected due to this pandemic.^[19] Besides, several questionnaires have been developed to study the effect of COVID-19 on lifestyle-related behaviors.^[20,21] This study enhances our comprehension of what bothers them and how they are adopting various preventive measures and utilizing available resources to enhance the quality of their lives. The preventive practices followed by elderly people is somehow more stringent than what is being followed by general public of younger age groups.^[22]

However, the study has few limitations. The participants were recruited through purposive sampling through contacts and networks of investigators. Moreover, our sample may not be a true representative sample as it does not include people especially from lower socioeconomic status.

Conclusion

This study provides a glimpse of the lives of middle aged and elderly people during COVID 19 pandemic. It provides insights about how these people are coping with this pandemic. Addressing the psycho-social and behavioral problems of these individuals can help in better adjustment to tide over the pandemic. Similarly, qualitative tools may be developed to generate objective data regarding effect of COVID 19 on psychosocial and behavioral aspects of people.

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Conflicts of interest

There are no conflicts of interest.

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