Abstract

Background: The unprecedented crisis of the COVID-19 pandemic has sent waves of anxiety and panic throughout the world. The infection does not seem to spare any age group but the elderly are at a higher risk. Aim: This article reviews the mental health issues faced by elderly due to enforced social isolation and various methods to mitigate the adverse effects of social isolation. Method: Relevant literature search on the theme of elderly, pandemic, COVID-19, social isolation was perused. Results: Elderly population is the most vulnerable group for coronavirus disease. Besides the infection, social isolation and quarantine puts them at a high risk category for various physical and mental health problems. Pandemic may cause exacerbation of existing or relapse of fears/phobias, anxiety disorders, obsessive-compulsive disorder. It may have catastrophic personal experiences leading to posttraumatic stress disorder. Various measures such as social facilitation interventions, psychological therapies, health and social care provision, befriending interventions and leisure skill development can be helpful in mitigating mental health consequences during isolation. Promoting sense of physical and social safety, hope, connectedness, calming and community efficacy have been found to be effective in controlling or mitigating the potential adverse effects of social isolation. Conclusion: During the COVID-19 pandemic, it has becomes essential that elderly are isolated and social distancing is enforced to keep them safe and protected. Besides the threat of contracting coronavirus infection, social isolation itself could be a source of anxiety and other psychological problems. It is important that health professionals are aware of these issues and become proactive in instituting measures to mitigate the adverse effects of social isolation.

Key words
COVID-19, Elderly, Mental Health, Pandemic, Social Isolation

Introduction

The unprecedented crisis of the COVID-19 pandemic has spread throughout the world affecting almost all countries, with rising levels of anxiety among affected and unaffected nations. Most nations have resorted to quarantine, lockdown and curfew to contain the community transmission of infection. All these techniques warrant people in the community to stay at home and maintain social distancing.

As is the case with most infectious diseases, older adults are the most vulnerable group. In this scenario, they are expected to adhere to these restrictions for extended periods, to minimise the risk of contracting the infection. However, these safety measures pose a risk of social isolation. Visiting community meetings, parks, neighborhood, places of worship and day centers are possibly the only socialization channels for most of the elderly. With lockdown or quarantine these are now not possible. Elderly who live with their families are better placed in this respect; but some of them may still expected to maintain social distancing within their house considering their own existing ailments or COVID symptoms of family members. As younger generation may be busy with various chores, it is quite possible that the elderly may get neglected even when they are with their families. This leads to social and psychological isolation, which may be a contributing factor for poor mental health.

Most preventive measures during infectious disease epidemics focus on prevention of the spread of infection and looking after the physical health of infected person. In this state of crisis, a wide range of psychological problems often accompany the outbreak. Social isolation and loneliness are particularly problematic in old age due to various reasons such as: decreasing functional limitations, economic and social resources, the death of spouse and relatives, changes in family structures and mobility.1 Lockdown adds more reasons to this list including: inactivity, repeated exposure to disturbing news related to the pandemic, reminiscences of previous traumatic events (and anxiety associated with those), the interactional problem within family members, and the lack of opportunities to share their worries. Confinement, loss of usual routine, and reduced social and physical contact with others are frequently shown to cause boredom, frustration, and a sense of isolation from the rest of the world, leading to distress.2,3,4
Social isolation among older adults is a ‘serious public health concern’ because of their heightened risk of cardiovascular, autoimmune, neurocognitive, and mental health problems. Santini et al have demonstrated that social disconnection puts older adults at a greater risk of depression and anxiety. Social isolation because of a pandemic brings other psychological issues such as: fear of contracting the infection (for self and family members), fear of quarantine or hospitalization, death (of oneself or family members), fear of being abandoned, anxiety related to day to day provisions, regular health checkup visits and worries about family members living far away. Sleep and appetite problems may become more pronounced in the absence of physical inactivity during the lockdown.

Quarantine can further amplify these problems. Separation from loved ones, the loss of freedom, uncertainty over disease status, and boredom can, on occasion, create dramatic effects. Suicide has been reported, substantial anger generated, and lawsuits brought following the imposition of quarantine in previous outbreaks.

In the context of prolonged lockdown and social distancing, loneliness can become a core component of a variety of psychiatric disorders through a subtly or grossly declared clinical picture. It may lead to hopelessness and discouragement, which can progress to depressive disorders and potentially self-destructive acts. It may aggravate fears and precipitate one or several types of anxiety disorders, including a variety of phobic syndromes (Box 1). Also, it may generate painful memories that, later, can make the experience of social isolation a prelude of a potentially invalidating posttraumatic stress disorder. Finally, it may exacerbate behavioral styles and symptoms of conditions such as obsessive compulsive disorder (e.g. washing hands repeatedly, sanitizing the household articles). Studies have revealed loneliness is associated with depressive symptoms in older age groups.

Sleep quality continues to be affected by feelings of loneliness in this age group. Sleep duration tends not to differ between lonely and non-lonely older adults, but the same amount of sleep is less restful and results in greater daytime fatigue and dysfunction.

Gow et al examined cognitive functioning in a cohort of 70 years-old persons and found a significant inverse association between loneliness intensity and general cognitive ability, processing speed and memory.

**Mitigating adverse effects of social isolation on elderly during pandemic**

There are various ways to support older adults during the social isolation period during the pandemic, which with all probability will continue for months. If elderly people are instructed and required to remain homebound, it is important to ensure that daily needs such as groceries and medications are delivered regularly, and urgent action is needed to mitigate the mental and physical health consequences of social isolation.

Thematic analysis done by Gardiner et al identified six categories of interventions based on their purpose, their mechanisms of action and their intended outcomes. The categories were social facilitation interventions, psychological therapies, health and social care provision, befriending interventions, pet therapy, and leisure/skill development.

Tsai et al evaluated a video conference program which aimed to facilitate contact between an older person and their family. They reported lower levels of loneliness among those using video conferencing. Creating a sense of companionship and keeping occupied were found to be effective in dealing with loneliness in older people.

Befriending interventions are defined as a form of social facilitation with the aim of formulating new friendships. The ‘Call in Time’ program, a national pilot of telephone befriending projects across the UK, is one of such programs. A mixed methods evaluation found that telephone projects were successful in alleviating loneliness through making life worth living, generating a sense of belonging and having a feeling of ‘knowing that there is a friend out there’.

Interventions focused on leisure activities and/or skill development were varied and included gardening programs, computer/internet use, voluntary work, holidays and sports. Higher use of the internet was also found to be a predictor of higher levels of social support and decreased loneliness. Indoor gardening programs for nursing home residents showed a significant positive

**Box 1: Effects of COVID-19 on elderly**

<table>
<thead>
<tr>
<th><strong>New onset symptoms</strong></th>
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<tbody>
<tr>
<td>* Fear of contracting infection (self and/or family)</td>
</tr>
<tr>
<td>* Fear of death (self and/or family)</td>
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<tr>
<td>* Fear of separation from family</td>
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<tr>
<td>* Insomnia</td>
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<tr>
<td>* Nightmares</td>
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<tr>
<td>* Generalized anxiety symptoms</td>
</tr>
<tr>
<td>* Depressive symptoms</td>
</tr>
<tr>
<td>* Compulsive hand washing</td>
</tr>
<tr>
<td>* Compulsive sanitizing household articles</td>
</tr>
<tr>
<td>* Post-traumatic stress symptoms</td>
</tr>
<tr>
<td>* Increased substance use (smoking, alcohol)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Worsening of existing conditions</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>* Hypertension</td>
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<tr>
<td>* Angina and other cardiac issues</td>
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<tr>
<td>* Diabetes</td>
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</tbody>
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<table>
<thead>
<tr>
<th><strong>Physical:</strong></th>
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</thead>
<tbody>
<tr>
<td>* Depression</td>
</tr>
<tr>
<td>* Anxiety</td>
</tr>
<tr>
<td>* Obsessive compulsive disorder</td>
</tr>
<tr>
<td>* Post-traumatic stress disorder</td>
</tr>
<tr>
<td>* Substance abuse/dependence</td>
</tr>
<tr>
<td>* Neurocognitive deficits</td>
</tr>
</tbody>
</table>

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effect on loneliness.\textsuperscript{20} Evidence from a qualitative study was useful for identifying how leisure activities reduced loneliness, for example by maintaining social contacts, spending time constructively and having interaction with others.\textsuperscript{21} Beyond this, cognitive behavioral therapies could be delivered online to decrease loneliness and improve mental wellbeing.\textsuperscript{22}

Use of digital platforms such as teleconferencing or videoconferencing can be used effectively to deliver these services while maintaining social distancing. However, consultation can only be given to those who can use internet enabled devices;\textsuperscript{23} and not all the elderly use internet, e.g. in the UK over one third of old people are not using the internet and do not have intention of getting online.\textsuperscript{24}

Hobfoll \textit{et al} identified five empirically supported intervention principles that could be used to guide and inform intervention and prevention efforts at the early to mid-term stages of global health crisis. These were: promoting a sense of safety, both physical and psychological (avoiding rumors and providing reassurance), to reduce the amplified unpleasant emotions of ongoing fear and anxiety; utilization of therapeutic elements (pharmacological, yoga, relaxation, mindfulness and other therapies) to calm down the heightened state of emotional responsiveness, which if left unattended may lead to various psychiatric disorders; instilling a sense of control and efficacy in reaching a positive outcome through one’s thoughts, emotions and actions; developing a feeling of connectedness to one’s group to garner security, support and love; and finally, instilling hope for a better future. These inter-related principles aim to promote a sense of control, efficacy, support and positivity and can be utilized at either individual, group or community level.\textsuperscript{25}

A triage tool has been developed by Seniors Without Families Team (SWiFT) for rapid needs assessment of vulnerable older adults with physical and mental health issues, financial problems and/or social needs. SWiFT tool is a feasible approach for rapid determination of the level of need or assistance necessary for vulnerable older people during crisis period.\textsuperscript{26} Similar tools may be developed and validated in different regions depending upon the existing resources.\textsuperscript{27}

Further, it is important to recognize from the outset that a person’s reaction should not necessarily be regarded as pathological responses or as precursors of subsequent disorder.\textsuperscript{25} All health care providers involved must have knowledgebase and cultural sensitivity on the care needs of elderly; this is also required for the volunteers working in the emergency care situations.\textsuperscript{26}

Nevertheless, some of the older adults may experience great distress and require community support or at times clinical intervention for their mental health concerns. As such, most people are more likely to need support and provision of resources to ease their feelings, rather than traditional diagnosis and clinical treatment.\textsuperscript{25}

It is of paramount importance to raise awareness amongst both health-care professionals and the public about these issues and about timely intervention. More research will help; however at present we can apply what we already know.

\textbf{Conclusion}

Isolating the elderly during COVID-19 pandemic might reduce transmission which is important and minimize the spread of infection to high-risk groups. However, adherence to isolation strategies is likely to decrease over time. Such mitigation measures must be effectively timed and continued for required duration to prevent excessive transmission and risk of morbidity and death due to COVID-19. The effects of isolation will be felt greatest in the elderly, specifically in the more disadvantaged and marginalized populations. The implementation of preventive strategies for the negative mental health impact of social isolation should be urgently prioritized for this population.

Interventions could simply involve interaction and providing practical support for essential items, more frequent telephone contact with significant others, close family and friends. Online technologies can be used to build and maintain social support networks and a sense of belonging. Health care workers, community outreach projects and voluntary organizations have an important role providing support for elderly throughout the social isolation period.

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