JOURNAL OF GERIATRIC CARE AND RESEARCH

ISSN 2397-5628
Journal of Geriatric Care and Research
2020, Vol 7, No 3

Insight

COVID-19 pandemic and care of elderly: measures and challenges

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Abstract

The on-going COVID-19 pandemic has compromised the physical and mental health of elderly in a complex way. The elderly population, with multiple medical comorbidities and cognitive challenges, are more vulnerable towards increased infection and mortality secondary to COVD-19. This article reviews the multifaceted challenges (physical vulnerability, access to health services, stigma, "infodemic", lack of social support, employment issues, elderly staying with vulnerable family members and others) concerning the elderly population, since the emergence of the pandemic. It also explores the practical solutions to prevent and contain infection, which may alleviate the physical, mental and social aftermath of the pandemic in this population. The convolution around ageism and frailty compounded with social isolation is likely to worsen the overall outcome of elderly during the pandemic. Adequate preparation, control of comorbid medical illness, infection prevention strategies and parallel measures to safeguard mental health are the integrated approaches towards a better outcome during COVID-19 pandemic. Striking a balance of humane, inclusive and holistic approach will safeguard this subset of population.

Key words

Aged, COVID-19, Health care, Informal Care, Mental health, Pandemic

Introduction

Amidst the changing trajectory of the COVID-19 pandemic, where the cure is still elusive the infection has taken a disproportionate toll on health of elderly with associated age related diseases. This age group is vulnerable to COVID-19 infection which runs a fulminant course often resulting in multiple organ failure, requirement of ventilator support, residual respiratory compromise and higher rates of mortality in comparison to younger adults.[1] The associated mental health outcomes arising from the indispensable precautionary measures to curtail the risk of infection has its own disadvantages.[2] The issues around ageism and frailty can influence the help seeking, polarisation of health services and a disruption of the economic, social and health outcome of elderly during the pandemic.[3]

This article discusses the various challenges (physical vulnerability, access to health services, stigma, "infodemic", lack of social support, employment issues, elderly staying with vulnerable family members and others) in safeguarding physical and mental health of older adults during this pandemic and explores feasible measures to mitigate infection risk and improve overall outcome.

Physical vulnerability to COVID-19

Due to better longevity many countries are witnessing a shift in population structure with increased aged population. The Centres for Disease Control and Prevention (CDC) data from USA and China suggest that nearly half of the facilities of Intensive Care Unit (ICU) was needed for elderly; and death related to COVID-19 infection in those above 65 year was more than 80%.[4] With increase in the aged population, the cumulative risk of lifestyle diseases like diabetes, hypertension, cardiovascular, kidney and respiratory diseases, strokes have increased. Around 20-50% patients with COVID-19 have diabetes mellitus. Often the elderly are on poly-pharmacy regimens; including angiotensin converting enzyme (ACE) inhibitors and angiotensin-receptor blockers (ARBs) that upregulate the ACE-2 receptor. Thus it is hypothesized that older individuals with such comorbidities may have an elevated risk for the severe course of infection with SARS-CoV-2. Obesity, poor nutritional state, substance addiction, late onset depression and frailty in elderly can further compromise their overall health status. Neurodegenerative disorders, visual and hearing impairment, mobility limitations impacts many aspects of prevention, including acknowledging health issues and seeking timely help. This subgroup of elderly can have under-recognised malnutrition, dehydration, bedsores and deranged metabolic parameters.[5,6] Uncontrolled use of over the counter (OTC) drugs and herbal remedies in some regions can adversely affect the already compromised physiological functions and may have unwarranted adverse reactions.

Lockdown and its impact on elderly

Availing health services during lockdown

As soon as the pandemic was acknowledged, many countries implemented nationwide lockdown limiting public movement and socialisation, as a measure to contain the risk of infection spread. Eventually the lockdowns were uplifted in a phasic manner. The need to protect the aging population was emphasised at each phase. However, these restrictions partly served to amplify the already existing disparity of health care services, hassles in assessing ongoing lifesaving procedures in elderly like dialysis, chemo and radiation therapy. Many local drug stores were closed which resulted in disruptions in supply of routine essential medications. Limited availability of public transport system prevented many to visit the destined pharmacy or hospital. Many with lifestyle diseases had to refrain from doing regular outdoor exercises. Many hospitals were converted to 'COVID only' centres and routine health care witnessed disruption although transient in most cases, only to re-emerge as tele services via apps or e-platforms. Even in hospitals, difficult clinical and ethical decisions on triaging and lifesaving procedures were impacted by frailty of the older adults as resources are finite.[7] The emergence of second and third wave, and the new strain of SARS-COV-2 infection has further puzzled the lives of this population.

Loss of social contact and employment

Nuclear family trend is emerging across regions of world including lower and middle income (LAMI) countries. Most elderly are at home alone; and often this issue is further compounded for separated or widowed older persons. 'Loneliness', a subjective perception of lack of meaningful relationships and 'social isolation', loss of social engagements and contacts are rather ignored but play an important role in physical and mental health. Restriction in social functioning is commonly associated with vulnerability to ill health, geriatric depression and premature mortality.[8] The containment measures in the pandemic related social distancing often translated to a complete social alienation of the elderly. Limited visits by family members, informal or formal carers, indirect stigma associated with the age related vulnerability to COVID-19, and restriction of movement have constricted numerous avenues of the social life of elderly for a considerable duration.

A considerable proportion of older adults had to face job layoffs or pause in their existing employment leading to decreased earning resources in the current pandemic. A recent survey by HelpAge India revealed that 65% of elders are facing livelihood challenges in face of pandemic.[9] Elderly migrant labourers, homeless mentally ill and destitute people were hit hard during the pandemic. Physical limitation, malnutrition, travelling long distance on foot brought out the issue of 'survival of the fittest' very much into reality. The social structure destabilised overnight exposing the most vulnerable people to plethora of disadvantages.

Many senior physicians and other health care workers (HCW) worked and volunteered during the pandemic. However job related precautions for this age group was not clear at many levels of health care system at least initially. There were additional issue of lack of appropriate personal protective equipment (PPE), inadequate planning, and lack of resources. Many elderly physicians and HCWs were at a higher risk category due to longer hours of exposure to possible risk of infections and comorbid metabolic diseases, Fear of infection, quarantine/isolation and burnout are common across different age range of HCW. However the older adults as HCW have higher risks of death due to COVID-19.[10]

Lockdown is being eased and countries are rebuilding on job and economic opportunities. Elderly will always remain the "weakest link" in preference for jobs as ageism related discrimination is deep rooted across countries.

Stigma and COVID-19 in elderly

The COVID-19 pandemic uncovered the psychosocial and environmental milieu which is largely ageist. As such there is lack of disabled- or elderly-friendly services for transport, medication delivery, jobs, marketplace and even hospitals. This issue is further important in LAMI countries, where a big urban and rural divide exists in terms of accessibility of facilities. The initial few months of COVID-19 pandemic were seen as a 'problem predominantly cantering older adults' and a social amputation of the aging population was perceived as the easiest solution. The stigma associated with suspected COVID-19 infection led many essential service providers to refuse to cater elderly citizens.[11] A majority of elderly are seen as redundant with a preconceived therapeutic nihilism in major walks of life. Nursing homes were abandoned by caretakers during initial period of pandemic where elderly succumbed to avoidable health crisis. Instances of neglect, abuse, disruption in ongoing care can masquerade as the 'necessary distancing to safeguard the elderly'. Acknowledging the helplessness, anxiety, guilt of passing on infection to near ones and inability to be with their loved ones in final moments, denial of a decent burial/crematory last rites were issues which further complicated the understanding the nature of grief and closure experienced during this pandemic.

'Infodemic' during COVID-19 pandemic

The information overload, wrong information about the pandemic and limited access to evidence based sources in a backdrop of reduced cognitive processing of elderly played a major source of exaggerated health related concerns.[3] Pandemic has brought on huge economic loss for the society and misinformation makes it worse. It impacts life in various different ways. Following authentic sources of information from trusted sources should be helpful.[12] Limiting exposure to exaggerated and fake information from print and electronic sources can reduce the anxiety and preoccupation. There is a role and responsibility of media to have a balanced approach to safeguard the physical, psychological and social wellbeing of society.

General precautionary measures

The necessary infection control measures like wearing masks, hand-hygiene, social distancing are the cornerstone of the infection containment. Encouraging indoor routines, exercises, Yoga, relaxation and healthy diet plan, hobbies and promoting a positive mental health may build resilience in elderly to sustain their wellbeing during the pandemic. Enabling elders in decision making and involving them in family affairs, planning ahead, teaching new technology and smartphone usage and appreciating their effort can render a sense of belonging and contribution.[13]

Spiritual wellbeing is one aspect of complete mental wellbeing. Often it is associated with a sense of subjective wellbeing. Fostering or engaging elderly in various means of spirituality can help lower the anxiety, distress, and increase the positive coping ability of people and serve as a source of strength, comfort and hope and sense of control.[14] Mindfulness exercises as a day to day practice may alleviate some of the doomsday and 'end of world' feelings. As Bhagwat Gita puts it - 'it is our anticipation of outcome and desire to control that creates a state of unrest; but what one should do is just to continue their respective duties' i.e. mindful engagement in duty / activities may help in dealing with the situation, rather than remaining worried about possible outcomes. Submitting the apprehensions and sharing it for a larger cause may regenerate inner harmony and tranquillity in difficult life situations.

Role of family and caregivers

Elderly staying with family

Frail older individuals need a stepped up care. It is a challenging task to prevent infection transmission while catering to their day to day needs and supporting their activities of daily living. Multiple caregivers should be avoided as far as possible and only a few family members should be designated for these tasks. Healthy nutrition, regular checking of metabolic parameters and areas of body prone to bedsores are important.[15,16] Bluetooth enabled cameras with consent can be installed to avoid frequent entry in their rooms. Outings to risky areas or visits by others should be avoided. Keeping medications in stock and having emergency health services contact are needed.

Family members who are directly involved in COVID care in community or hospitals need to take extra precautions if they share the same housing with elderly. Strict social distancing, avoiding intermixing of laundry, frequent hand and respiratory hygiene, cleaning frequently touched surfaces with disinfectants and avoiding co-habitation during active COVID duty (for HCW) or quarantine can bring down exposure to the elderly member to some extent.[15]

Elderly living alone (staying far from their family or don't have family)

The family members staying away from the elderly can still keep a check on them through regular calls or e-mails/messages.[17] Empowering these individuals by storing important contact numbers including relevant helpline numbers in their speed dial list in telephone can serve as a ready access to connect in emergencies. Many governments have launched COVID tracking mobile phone applications such as Arogya Setu (India), HaMagen (Israel), NHS smartphone app (England), TraceTogether (Singapore).[18] These apps help the users know if they have recently come in contact with anyone who tested positive, helps monitor symptom and have instruction for home quarantine.

In care homes, caregivers need to be extra-vigilant to detect early potential threats of contracting the infection or signs of infection, especially where maintaining social distance is difficult, there are staff-shortages or inadequate supervision. It is better for the care home staffs to be trained for putting intravenous lines and oxygen administration in case of emergencies, in addition to the basic first aid. An advanced care plan should be in place after discussion with the inmates and this would make care delivery much swifter. This should involve informing and emphasizing the plan to everyone involved in the care homes and empanelling nearby hospitals; this may avoid major hurdles and chaos. Face to face calls with family and usual friend circle might ease the anxiety and panic.[16]A network of some close friends of the family who stay near the elderly can routinely keep a check, run errands or restock the essentials when necessary. Unnecessary medical visits to hospitals can be postponed; instead telemedicine services can be utilised.[17]

Elderly who test positive for COVID-19

Given the seriousness of the illness progression, early symptoms of COVID-19 must not be neglected and a proactive testing is required. Preparing the elderly psychologically without generating panic should go hand in hand; which may require repeatedly informing and explaining about the meaning of test results, need for isolation, symptoms, possible treatment options, indications for hospitalisation etc. Reassuring them time and again via telephonic contact is a feasible option for family members who live away from the elderly or when adhering to the local government norms of isolation. This can mitigate the feeling of 'being left on their own'. Use of over the counter preparations or any self-medication should be in accordance with the professional medical guidelines. List of medications and medical conditions should be thoroughly communicated to the medical team attending the patient in isolation. This will aid the treating doctor to take a balanced decision, minimise drug interactions.

Conclusion

The presentation of COVID-19 is most severe in elderly population across the globe. It is often complicated by associated medical comorbidities, frailty, compromised immunological status. The necessary containment measures for infection control come with an impact on mental and social wellbeing of the elderly. Various strategies can be adopted to address the issues related to

social isolation, seamless continuation of existing medical treatments, managing COVID-19 infections as and when they occur and to support the recovery process in the elderly who are the most vulnerable group. Support systems for the elderly should take holistic care of mental and physical health while safeguarding them against ill-treatment and abuse. These should be humane, have a balanced approach and take into consideration of the views of the elderly, while instituting scientific, evidence-based methods.

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Competing interests: None.

Received: 5 July 2020; **Revised:** 26 December 2020; **Accepted:** 26 December 2020

Citation: Mishra S, Bhoi R, Ravan JPR, Nath S, Kar N, Padhy SK. COVID-19 pandemic and care of elderly: measures and challenges.. Journal of Geriatric Care and Research 2020, 7(3): 143-146.

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