



## **COVID -19 in Geriatric Population**

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### **Authors' contributions**

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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### **ABSTRACT**

The causative factors of Coronavirus disease mainly the viruses. Through news we aware that pneumonia cases seen recently in Wuhan city, China. Due to unknown causes. Coronaviruses that cause illness such as a common cold. The Coronavirus infection identified with respiratory symptoms and pneumonia, the severe form of coronavirus infection mainly associated with death and low immune system patients. It is very important for us to more focus on geriatric people because in our countries, geriatric group people facing health problems at this present situation. According to articles Clinical Pathology, Pathogenesis, Immunopathology, and Mitigation Strategies, in that said geriatric people and low immune system patient with symptoms related history are more prone to COVID infection. But according to recent information by WHO all people are at risk of coronavirus but mostly geriatric people facing more risk of developing a severe respiratory infection. Geriatric people easily get coronavirus syndrome due to physical changes that occur as increasing age. There were 95% of these deaths seen in geriatric people above 60 years older. Above 50% of all fatal conditions occurred in geriatric people between 60- 80 years ago. There having disease control and prevention center, which indicate that rates of hospitalizations, intensive care unit admissions and mortality reported among COVID-19 cases in the United States are substantially higher among patients older than 45 years compared with younger patients, with case-fatality rates exceeding 1.4% among patients aged 55 to 64 years and exceeding 2.7% among those aged 65 to 74 years.

*Keywords: SARS-COV; COVID-19; geriatric; population.*

## 1. INTRODUCTION

COVID-19 disease is caused due to the new coronavirus, It has not been previously found in human beings. In most cases of the corona virus having symptoms like dry cough, tiredness, and fever, but sometimes fever may not present in older people. Mild range symptoms like body aches and pain, congestion in the nose, running nose, throat infection, or dehydration. Writing the articles on COVID -19 in geriatric population is very important in according to present situation because COVID -19 spread fastly in population but due to physical ability to cope up with COVID -19 infection is less in geriatric population and according to my observation in everyone house having older people and if they get an infection so it will be very serious condition and this disease transmission chain is spread all over society and ultimately increase the mortality rate among the population so it's very important to focus on Geriatric population. COVID-19 causing the Coronavirus Disease 2019, first reported with pneumonia-like symptoms in Wuhan city of China in late 2019. The initial human-to-human spreading of the virus was noted in an epidemiological investigation on January 20, 2020, where two patients were detected COVID-19 positive in Guangdong Province and had no history of personal visits to Wuhan in the past, Subsequently, the assumptions of human-to-human transmission strengthened by the report of COVID-19 in 14 hospital staff from patients. Since then, SARS-CoV has affected 287.239 persons and plagued more than 11.921 human patients. Although currently, the case fatality rate (CFR) in COVID-19 outbreaks is less than previous SARS and MERS outbreaks, a sharp rise in CFR has been observed during the last few weeks, reaching to 4 percent, and consequently, COVID-19 were entered in the pandemic stage.

Geriatric assessment programs have become a growing component of the health care delivery system for the elderly in the United States [1]. The Covid-19 pandemic (SARS-CoV-2) has affected masses of people around the world, with some being disproportionally exposed to the associated risk due to their age, employment status, financial status, illness or other factors, One such group is the elderly, who are not only vulnerable by being at greater risk of death [2]. The most prominent clinical signs that were manifested by the COVID-19 patients are fever,

coughing, pneumonia, chest pain with bilaterally consolidated lungs, etc. Deaths in the severe form of COVID-19 were reported mostly due to respiratory failure. Probably caused by hyper inflammation resulted in lethal pneumonia. COVID-19 associated fatalities were mainly reported in elderly patients with known comorbidities than young, healthy people and children probably due to their strong immunity. A retrospective study evaluated the susceptibility of COVID-19 in older patients where elderly patients showed higher PSI score and elderly patients also possess more chances of multiple lobes involvement [3].

## 2. COVID-19: A BRIEF OVERVIEW

SARS-CoV-2 has spread rapidly through travelers to 167 countries across the globe,(WHO2020, Wilson and Chen, 2020) Apart from China, the countries severely affected by this virus include Italy, Iran, South Korea, France, Spain, USA, Japan, Spain, and a few others (WHO, 2020).Geriatric people having a risk of developing of a respiratory problem as early. This is a most important observation of the European part, in the top 30 countries having the largest number of older people; all but Japan are our Member States in Europe. The European countries affected by the pandemic disease more [3].

According to present information, the death rates were more in older people due to COVID 19 infections; by information over 90% of deaths occur among geriatric people above 60 years of age. Greater than 50 percent of deaths occurred were in geriatric people above 80 years and also found that 8 out of 10 older people having deaths are occurring in individuals with a minimum one underlying co-morbidity, in those only having cardiac diseases, Increase blood pressure and diabetes mellitus, but also with a range of other chronic underlying conditions [4].

## 3. GERIATRIC PEOPLE HAVING THE HIGHEST RISK FROM COVID-19 NEED TO THE PREVENTION OF FURTHER COMMUNITY SPREAD OF THE CORONAVIRUS

There were some reasons due to that geriatric people are greatly impacted by a coronavirus which included the physiological changes in

geriatric people associated with the aging process, low immune functional system and multimorbidity which expose to geriatric people to more susceptible to any type of infection itself and make them more likely to suffer severely from Coronavirus infection and more serious complications of these but increasing age it is not only one risk factor responsible for to get coronavirus infection "COVID-19 only affects older people" the fact not correct [4]. All age groups are at risk of contracting COVID-19, older persons are at a significantly higher risk of mortality and severe disease following infection, with those over 80 years old dying at five times the average rate. An estimated 66% of people aged 70 and over [5]. According to information 10 to 15% of people less than 50 years age having a moderate range to severe form of infection. More Severe form of serious cases of coronavirus syndrome has identified in people in their teens or twenties, with more patients requiring intensive care and some accidentally died also. Older adults were more prone to get the risk of a severe form of infection from COVID-19. This is a most important observation of the European part, in the top 30 countries having the largest number of older people; all but Japan are our Member States in Europe. The European countries affected by the pandemic disease. As information over 90% of deaths has occurred among geriatric people above 60 years of age. Greater than 50 percent of deaths occurred in geriatric people above 80 years. Also found that 8 out of 10 older people having deaths [4].

Elder group they take more drugs than their younger counterparts and are known to be at risk of the side effects of many of the drugs they consume. The study showed that 34 % geriatric patients were suffering from cardiac disorder, 22% from diabetes and 18% from osteoarthritis among elderly population. The study conclude that cardiac disorders, diabetes and rheumatism were the most prevalent diseases [6].

Coronavirus articles also said that COVID -19 higher among the geriatric population so need to Health Advisory for Elderly Population to prevent COVID -19 infection. Recent estimates from the Disease Control and Prevention center indicate that rates of hospitalizations, intensive care unit admissions and mortality among reported COVID-19 cases in the United States are substantially higher among patients older than 45 years compared with younger patients, with case-fatality rates exceeding 1.4% among

patients aged 55 to 64 years and exceeding 2.7% among those aged 65 to 74 years [7].

The people above the age of 100 having reports of they were admitted to hospital for infection of COVID-19 and they have recovered from infection but it is related to very fewer cases. It is indicated that healthier people with good immunity easily cope up with the problem. Those geriatric People who were healthy that are less risk of disease for those in self-quarantine or working from a home office, important to maintain good health with the use of hygienic nutrition, physical activity, and staying away from tobacco use and drinking alcohol. The focus to contained the pandemic may result in the disruption of routine health services, interruption of the medicine supply, confining of patients and deleting social and public services which impact people suffering from chronic conditions of heart diseases and lung diseases, diabetes or with immune systems that are weak including from cancer treatment [4].

#### **4. THE SUPPORT SYSTEM OF OLDER PEOPLE DURING THE COVID-19 PANDEMIC**

According to my view, There will be support and protection of older people is very important, in such condition they panic quickly because they living alone in the community. All geriatric people should be treated with respect by health professionals and what they need should fulfill the need of older [8]. The elderly rely on social connection more than most and they need it now more than ever. The elderly and retired sometimes need a helping hand and they also often need to have people around them [5]. The older people want the need of their families and caregiver, social support is an essential part, during the period of isolation and quarantine, older people needing a supply of safe nutritious food, basic supplies, money, medicine to support their physical health, and care. Dissemination of information a clear critical message given to older how to stay safe or to take care of in a mentally or physically ill condition. Maintaining a healthy lifestyle while in self-quarantine or isolation. Older people were depending on the support from community people and maintaining daily activity, stay active, and eating nutritious, balanced meals, etc. Finding ways to stay socially connected is even more important for this age group. Dr. Kluge conveyed a special message to younger viewers: "If keeping your grandparent's safe means you can't visit them in

person, talk to them every day so that they don't feel alone. Physical distancing is not social isolation" [4].

**Preparedness of older people for prevention of coronavirus in their community area:**

- You should aware to older people regarding special needs health measures, services, and source of information in the community , availability at an emergency time exp Home services, Psychological need, etc.
- You should provide a basic supply of need that are at least two weeks and delivered to where it needs -(E.g. eating items, assistive items like batteries, and prescribed medicines) ask family member, neighbors, or community leaders to get help for delivery of prescribed medicines and sure that your mobile phone is with you and having charge regularly it helps you to call friends and family members in an emergency is help you.
- You should keep a list of emergency numbers- e.g. COVID-19 local helpline, nearest emergency hospital, and health emergencies numbers, and supportive member contacts e.g. family members
- You should provide support by a caregiver, identify the older people's trust on whom, daily living and caring needs in case the caregiver is not able to provide or continue in care.
- If more than two people lived together in the home, required to prepare a separate room for living at home for them but that in case anyone in family members showing

symptoms regarding coronavirus can be isolated from others. If in your home not having enough space for self-isolation, contact with community leaders or local health authorities to get help.

- You should think regarding health care and support system, availability of medical treatment, in case something serious health condition happens with older people and they are not able to make their own decisions. If they want an advanced care plan to record your treatment, you can talk about it with a health-care worker or someone that you trust [4].

**5. ROLE OF PROFESSIONAL HEALTH CARE WORKERS IN PROVIDING COMPREHENSIVE CARE TO OLDER PEOPLE**

Health care workers play a critical role in providing long-term care to older people. "Before the COVID-19 pandemic, they worked in challenging conditions, whether in the community or nursing home facilities. The current situation is a painful reminder not to cut budgets for essential services". Frontline people like nurses and health care workers are "Our heroes". They give their best every day this is important for those providing health and social care to older people living in their communities or long term care facilities. These are our colleagues who care for those who are among the most vulnerable: people with frailty and those living with dementia [2]. The Previous studies showed that telehealth system very helpful prior to the coronavirus disease 2019 pandemic [9].

**Table 1. Telehealth use in emergency care during coronavirus disease 2019**

<b>Category of use</b>	<b>Summary of findings</b>
Pre-hospital	In the pre-hospital setting, telehealth has been used as a emergency screening care tool .
Within Emergency department	Emergency departments have used telehealth as screening tool for a acute care needs.
Post-Emergency department discharge	Emergency departments have applied telehealth after discharge to extend care such as follow up care .
Education	Telehealth have also provided platforms for new educational initiatives for nurses and health professionals .
Care and resource	The use of telehealth has provided emergency departments to coordinate medical resources during the pandemic.

## 6. HEALTH-RELATED ADVICE FOR ELDER PEOPLE OF OUR COUNTRIES DURING THE CORONAVIRUS SYNDROME -BY HEALTH PROFESSIONALS

COVID -19 was a fatal infection to all populations but the major risk for an especially geriatric population so according to recent scenarios day by day it's increasing gradually among older so need to Health advisory for Elderly Population. Most elder populations having a greater chance of getting coronavirus infection because of their decrease immunity and body reserves, as well as more number of associated comorbidities like diabetes, Increase blood pressure, kidney disease, and pulmonary disease. Also, it tends to be more severe in the case of the elderly resulting in a higher mortality rate among them.

### DO'S:

1. Keep yourself at home, Avoid going to meet. If any meeting is very argent then one-meter distance should maintain.
2. Clean the hands regularly while touching to objects with soap and water.
3. While sneezing, coughing should use clean cloths regularly.
4. Used homemade fresh and cooked foods only, drink water frequently and use fruit juices to build immunity.
5. Do Yoga and meditation every day.
6. Prescribed medicines should take regularly.
7. Keep contact with family members, relatives, and friends by phone call.
8. Cleaning should do daily with disinfectant.
9. If having high-grade fever, cough, and/or breathing difficulty immediately take treatment.

### DON'Ts:

1. Don't touch the face, eyes, nose, etc.
2. Avoid going near to affected or sick people.
3. Avoid self-medication.
4. Avoid shaking hands or hug to friends.
5. Avoid going to the hospital unnecessarily. As far as teleconsultation preferred [10].

## 7. CONCLUSION

The SARS, COVID -19 continues to expand in the form of pandemic and might be responsible

for massive causalities, and Bats are reported to be the reservoir host. COVID -19 in geriatric population very important in according to present situation because COVID -19 spread fastly in population but due to decreased physical ability to cope up with COVID -19 infection is less in geriatric population and according to my observation in everyone house having older people and if they get an infection so it is very serious condition and this disease transmission chain is spread all over society and ultimately increase the mortality rate among the population, so it's very important to focus on Geriatric population. The main clinical signs associated with the COVID-19 like fever, coughing, sneezing, headache, respiratory distress, chest pain, and fatigue are suggestive of the massive involvement of lungs as principal organs leading to severe pneumonia and subsequently death. COVID -19 is a fatal infection to all populations but the major risk for an especially geriatric population so according to recent scenarios day by day, it's increasing gradually among older so need to Health advisory for Elderly Population.

### CONSENT

It is not applicable.

### ETHICAL APPROVAL

It is not applicable.

### COMPETING INTERESTS

Authors have declared that no competing interests exist.

### REFERENCES

1. Rubenstein LZ. Geriatric assessment programs in the United States. Their growing role and impact. Clin Geriatr Med. 1986;2(1):99–112.
2. Cugmas M, Ferligoj A, Kogovšek T, Batagelj Z. The social support networks of elderly people in Slovenia during the Covid-19 pandemic. PLOS ONE. 2021; 16(3):e0247993.
3. Dhamma K, Patel SK, Pathak M, Yattoo MI, Tiwari R, Malik YS, Singh R, Sah R, Rabaan AA, Bonilla-Aldana DK, Rodriguez-Morales AJ. An Update on SARS-COV-2/COVID-19 with particular reference on its clinical pathology

- pathogenesis, immunopathology, and mitigation strategies—A Review; 2020.
4. World Health Organization. Coronavirus disease (COVID-19) outbreak. Geneva; 2020.
  5. Caring for the elderly during the COVID-19 pandemic.
  6. The support system of older people during the COVID-19 pandemic: - Google Search.
  7. Awanish P. Prevalence of diseases and observation of drug utilization pattern in geriatric patients: a home medication review. Indian Journal of Pharmacy Practice. 2009;2(1):75–80.
  8. Buerhaus PI, Auerbach DI, Staiger. Older clinicians and the surge in novel coronavirus disease 2019 (COVID-19). JAMA; 2020.
  9. Jaffe TA, Hayden E, Uscher-Pines L, Sousa J, Schwamm LH, Mehrotra A, et al. Telehealth use in emergency care during coronavirus disease 2019: a systematic review. Journal of the American College of Emergency Physicians Open. 2021;2(3): e12443.
  10. World Health Organization. Coronavirus disease (COVID-19). Advisory for Elderly Population; 2020.

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