Ageing societies and the first and second waves of the COVID-19 pandemic – Statements of the European Geriatric Medicine Society and measures of the Hungarian Government concerning older people

A. LELBACH\textsuperscript{1,2,3,*} and E BÉNYEI\textsuperscript{2}

\textsuperscript{1} European Geriatric Medicine Society (EuGMS), Full Board, Genoa, Italy
\textsuperscript{2} Departmental Group of Geriatrics, Department of Internal Medicine and Oncology, Faculty of Medicine, Semmelweis University, Budapest, Hungary
\textsuperscript{3} Dr. Rose Private Hospital, Budapest, Hungary

ABSTRACT

\textbf{Purpose:} Ageing of the societies is a demographic phenomenon in the developed world. SARS-CoV-2 is a novel human coronavirus responsible for a pandemic of coronavirus disease 2019 (COVID-19). World Health Organization (WHO) data demonstrated that the first two waves of the pandemic had the most severe impact on older people and that is why new guidelines and protocols were necessary in geriatric medicine to protect senior citizens. 

\textbf{Materials and methods:} In our publication, we summarise the three statements of EuGMS concerning the first and second waves of COVID-19 pandemic in Europe. Besides following the European recommendations, a proper local response was necessary in each country.

\textbf{Results:} The Hungarian Government has successfully completed the necessary measures during the first two waves, which are summarised in our publication. Those measures took into consideration not only the international guidelines, but the capacities of the healthcare system, as well as the sociodemographic and economic characteristics of the country.

\textbf{Conclusions:} Successful local defence against COVID-19 required adequate and optimised interpretation of the international guidelines to save the life of thousands of older adults in Hungary.

KEYWORDS

ageing societies, COVID-19, EuGMS statements, WHO guidelines, measures of the Hungarian government

INTRODUCTION

Ageing societies and COVID-19 pandemic

A main demographic phenomenon of the developed world is the ageing of the population. Since 1950, the number of people aged 60 years and over has tripled and it is projected that by 2050, senior population will reach 2.1 billion in the world [1]. Ageing of the societies severely affect European countries.

The worldwide spread of SARS-CoV-2 has created serious new challenges in medicine. Despite the extensive efforts that had been made to control the disease, the virus had spread all over the world. The rapid transmission made the WHO declare a pandemic on March 11, 2020. After the first and second waves, as of December 1, 2020, there had been 60 million confirmed cases and almost 1.5 million deaths [2].

Cough, breathing difficulties, fever, fatigue, headache, and loss of smell and taste are the most frequent symptoms of COVID-19, as well as gastrointestinal ones (diarrhoea, nausea),
but the appearances of the symptoms are variable. They usually begin one to fourteen days after exposure to the pathogen [3, 4]. Noticeable manifestations do not develop in at least a third of people who are infected. Most (81%) develop mild to moderate symptoms out of those who develop clinical manifestations apparent enough to be classified as COVID-19 cases, while severe symptoms (hypoxia, dyspnoea) are developed by 14% and critical status (shock, respiratory failure or multiorgan dysfunction) by 5% of the patients [5].

Significant independent risk factors for severe COVID-19 are advanced age and medical conditions such as immunocompromised status, hypertension, cardiovascular disease, and morbid obesity. Older adults were the people most affected by the first two waves of the pandemic in European countries, causing the most severe medical difficulties in these ageing societies. The COVID-19 pandemic draws attention to the fact that the appearance of different infectious diseases in old age is an important pathological factor besides those non-communicable diseases that had been emphasised in the previous decades.

MATERIALS AND METHODS

Statements of EuGMS in the first and second waves of the COVID-19 pandemic

EuGMS is the collaborating and coordinating organisation of the national geriatric medical societies of the European Union member states, but also includes members like Albania, Armenia, Belarus, Iceland, Israel, Norway, North-Macedonia, Russia, Serbia, Switzerland, Turkey, and the United Kingdom (Fig. 1). Besides these countries, there are currently also three observer members: Bulgaria, Croatia, and Cyprus. The EuGMS’s mission is to develop geriatric medicine in all member states.

EuGMS reacted to the COVID-19 pandemic in an active way. Three statements were published by the Executive Board in the last year and a half and the Global Europe Initiative working group is currently preparing a representative comparative study. The EuGMS has made serious efforts to provide special advice to the European geriatricians. Because of the pandemic, a new online program for the 16th online e-congress of EuGMS was created and COVID-19 was the main topic. The most acknowledged professionals had spoken about the different aspects (epidemiologic, clinical, therapeutic, sociodemographic, and regulatory viewpoints) of treating older patients during the pandemic. In addition, the special interest groups were given the chance to introduce and explain their latest results. Herewith we present the summarisation of the EuGMS statements published during the first and second waves of COVID-19 pandemic (Table 1).

The WHO’s point of view about the dangers of the virus to older adults

WHO played a leading and comprehensive role in controlling the pandemic. Taking the rapidly changing situation of the pandemic into consideration, the WHO had continuous periodical guidance focusing on protective measures, diagnostic protocols, and indications of diagnostic testing in order to control the pandemic. Dr Hans Henri P. Kluge, Regional Director for Europe, WHO, has explained his point of view in the latest issue of the official journal of the Hungarian Gerontological and Geriatric Society „Idősgyógyászat” (Geriatric Medicine) as follows:

"The Covid-19 pandemic has had a significant impact on older people, affecting them more than any other age group. Whilst we are still waiting to grasp the full impact of this health crisis, we expect that the levels of excess mortality being recorded in the European Region will have a negative effect on life expectancy.

The pandemic has also exacerbated the isolation and social exclusion often experienced by older persons, particularly those living with dementia or other forms of cognitive decline. Being separated from their families and communities for extended periods of time can, in more severe cases, lead to depression and anxiety. Considering such negative consequences, and as more and more older people are vaccinated, we need to urgently explore how we can start to re-establish daily routines safely.

In order to minimise the impact of any future pandemic on older people, WHO has been developing guidance on how to improve infectious disease control and vaccination rates for this cohort. This is useful both in the context of the current and any future pandemics, as well as strengthening protection against endemic viruses such as seasonal influenza." [8].

RESULTS

Hungarian measures during the first two waves of the COVID-19 pandemic concerning older people

The pandemic has affected Hungary and those older people living in the country. From the declaration of the pandemic, throughout the first two waves of the pandemic, the Hungarian Government has paid special attention to people of age realising the possible dangers of the virus to senior citizens. After the first news appeared about the virus in China,
The summarisation of the first statement of EuGMS published on March 12, 2020 [6]

- Despite the lack of relationship between age and probability of contracting the virus, older adults are at higher risk of developing serious complications from infection, therefore political authorities should offer them strict preventive measures to minimise the risk of infection.
- Additional aspects pointed out:
  1. It is important that affected care staff for people at higher risk are educated based on the best practical guidance and supported with adequate antiseptic facilities.
  2. Advanced age should not be an exclusion criterion from specialised hospital units, as it is important that everyone receives the optimal medical treatment according to the severity of the disease and the capacity of the healthcare system in their own country.
  3. During this coronavirus outbreak, older people might experience an understandable slowing down in the discharge from acute care to rehabilitation/post-acute care units. Although reasonable (given the fact that rehabilitation/post-acute care units want to be sure the patient is not infected), this generates prolonged hospital stays with increased risk of iatrogenic consequences. We should therefore make all the necessary efforts for the patients discharged from acute care units and probably use more home care facilities for rehabilitation purposes.

EuGMS states that they will work with the national Geriatric and other Medical Societies across Europe for common actions related to COVID-19, and they decided to create a website space suitable for the discussion of all the questions related to the impact of coronavirus on older people.

The summarisation of the second statement of EuGMS published on November 13, 2020 [7]

- After observations during the first wave of the pandemic and a recent e-congress with more than 2,000 participants, the Executive Board of the EuGMS has decided to focus their actions on two specific areas in order to provide better protection and medical care for older patients:
  1. Preventing the spread of the virus among Nursing Home residents by teaching and instructing the staff how to provide optimal treatment including palliative care when appropriate - how to reverse the impact of isolation policies on residents.
  2. Assess in all European countries whether age is a criterion for rationing of intensive care units versus functional and clinical status of the patient.
- EuGMS has decided to develop initiatives with national geriatric and other medical societies for joint actions in these areas.

The website space suitable for discussion has been reactivated in order to facilitate dialogue and to discuss all questions concerning the impact of the virus on older people.

The Government of Hungary formed the Hungarian Operational Staff, which was led by the Interior Minister and the Minister of Human Resources, the latter being also responsible for the health care in Hungary.

The virus first appeared in Hungary in March 2020. On 15 March Hungarians commemorate the Revolution and the following War of Independence in 1848–1849, however all major events were cancelled within three days across the country followed by the suggestion of the Operational Staff. State of emergency was declared and as part of the Government’s initiative, older citizens were placed under special protection. A timespan between 9:00 am and 12:00 am was determined for the people above the age of 65, when only they were allowed to enter shops, markets, and supermarkets. The Government of Hungary also ordered everyone to wear a mask on public transport and in closed public areas; this measure was put in place to protect mainly the older citizens.

Retirement homes in Hungary were at significant risk in terms of spreading the virus. Thus, the Surgeon General banned visitors and forbade the admission of new patients in such institutes. Despite every effort, the virus has spread in a few retirement homes and made the biggest destruction in the Pesti Road Retirement Home. The Government rushed to the retirement home’s aid by providing protective gears and performing - through the Military of Hungary - thorough disinfection several times. The same procedure applied to every patient in Hungary regardless of the patient’s living situation (whether the citizen lived in a retirement home or in his/her own property). Patients with symptoms of the coronavirus as well as the contact persons had to be tested, and if it was necessary, they had to be hospitalised. According to the procedures of the National Public Health Center of Hungary, every confirmed coronavirus patient in a retirement home had to be quarantined, and similarly every other confirmed coronavirus patient had to be quarantined in his/her home in order to stop the transmission of the virus. In Hungary, to organise and maintain the health care of the retirement homes are the responsibility of the local authorities, ecclesial or civil organisations. Most of the retirement homes followed the applicable procedures and the Government of Hungary provided help through different organisations for the already infected residents of retirement homes.
Moreover, in Hungary, there were no ethical questions regarding the care of older citizens, while in some Western European countries ethical questions have emerged regarding this subject. Everybody deserved and deserves the same healthcare services regardless of their age and living circumstances. Sufficient quantity of hospital beds and quarantining of the confirmed coronavirus patients in every hospital were possible by delaying the non-urgent surgeries and harmonising the bed capacity of the hospitals in the country. The introduction of telemedicine was also a success, the general practitioners consulted over the phone with the suspected coronavirus patients. In addition, the Government of Hungary also created a procedure for the patients - especially for the older citizens - to collect the prescribed medications safely, thus older citizens did not have to go in the pharmacy, a relative or a neighbour could collect their medications.

Hungary has followed the suggestions of the WHO during the pandemic, the procedures of the National Public Health Center were based on the suggestions of the WHO and were updated as many times as was necessary. The Hungarian healthcare system and guidelines on diagnostics were created alongside the international standards and made no distinction between young and old. Everybody receives and deserves the same healthcare services.

In addition to the above-mentioned protective actions (timespan for shopping, wearing face mask), the transparent and consensual message - in which we asked and encouraged the relatives of older adults to lend a helping hand to them in everything they could - also helped a lot in the protection of older citizens. In certain regions of the country, relatives of older adults were unable to help their family members of older age, thus the Government of Hungary obligated the mayor of these regions to provide food and products for basic needs to the older citizens, so they did not have to leave their home and be under the risk of getting infected with the virus.

Many people contributed to inform others about the necessary protective measures and the government’s campaign also helped spread the message. It can safely be said that social solidarity has been achieved in Hungary. These efforts made it possible for older citizens to stay home and thus stay safe from the coronavirus.

During the first two waves of the coronavirus pandemic, Hungary’s protection against the virus was effective. The social institutions, especially the retirement homes performed outstandingly, the spread of the virus has decelerated in these institutions and many old patients have recovered from the disease [9].

**DISCUSSION**

**Brief overview of the third and outlook on the upcoming waves of the COVID-19 pandemic - EuGMS, climate change, political changes, and migrating populations**

The EuGMS has highlighted that during the third wave the most vulnerable population is still people of old age. A short overview about the third statement of EuGMS [10] is summarised in Table 2.

As of today, vaccination has become a standard protocol in most European countries for older adults. But some upcoming sociodemographic changes can influence the protection of older people in developed countries as these changes affect the spread of different mutations of COVID-19. The drastic changes of life circumstances due to climate change, the persecutions happening because of political and religious reasons, as well as the migration of larger populations because of economic reasons create a serious challenge in Europe. Those migrating populations have a differently developed (or undeveloped) healthcare systems in their homelands, where the vaccination protocols and routines common in the developed world often do not exist. A difficult task in the fourth and possible upcoming waves of COVID-19 might be the protection of older people with weakened immune system against mutated virus variants of COVID-19 (as it is proven, different vaccines protect with different efficacy against the virus mutations). That is why even a high ratio of vaccinated people cannot entirely protect the population against the infection and a possible development of a herd immunity because of those virus variants is still questionable. All these factors underline the importance of individual protective measures and strategies.

**CONCLUSIONS**

The SARS-CoV-2 human coronavirus infection has the most severe effect on older adults. That is why COVID-19 pandemic has a great impact on ageing societies. Different countries have different characteristics (sociodemographic, economic, healthcare system), therefore, adequate local interpretation of international recommendations and statements (e.g., WHO and EuGMS) are needed for the most
optimal local management of COVID-19 pandemic. The Hungarian Government followed this policy during the first two waves of the pandemic, which saved the lives of thousands of senior citizens in the country.

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