## COVID-19 has hit nursing homes hard

Kaisu H. Pitkälä, MD, PhD

In most countries the first wave of COVID-19 mainly killed people in nursing homes. Whereas the nursing home population represents less than 1% of the total population in European countries, nursing home residents accounted for 31-80% of all deaths during the first wave in various countries [1-5]. In fact, the reported COVID-19 deaths may be an underestimate since these deaths have accounted only for two-thirds of excess deaths [6]. Once infected, about 26-50% of symptomatic patients in nursing homes have died [4,7,8].

While the nursing homes responded to the first wave crisis *ad-hoc*, we have learnt many things over the past six months about COVID-19 infectivity, how it spreads and – most important of all – what means we have to prevent it. In this issue, Blain and colleagues [9] present EUGMS guidance to prepare European long-term care facilities for COVID-19. This is timely and important summary of what we know about testing for COVID-19, and how to prevent the entrance and spread of the virus to long-term care facilities. Importantly, it also emphasizes the palliative care of these patients and clarifies how to best prevent other harmful COVID-19 outcomes such as loneliness.

The virus entered long-term care facilities insidiously. It came in via visitors, staff, and new residents who were asymptomatic and unaware of their infectivity. In fact, when facility-wide testing has been performed, it has been shown that half of the infected residents and staff might be asymptomatic [4,8]. The outbreak revealed how unprepared and vulnerable nursing homes were for the crisis: the staff had too little education in prevention and control of infections. Furthermore, large numbers of deputies and frequent staff turnover exacerbated the spread of infection, and the shortage of personal protective equipment at the beginning of the pandemic was untenable. Thus, COVID-19 has shown the urgent need for staff training and standards of geriatric care in nursing homes – both in terms of resources as well as expertise [10,11]. It has been suggested that the highest infectivity and mortality rates in nursing homes have been associated with the location and size of nursing homes, shortage of staff, quality of care, high resident density and low

socio-economic level of residents [4, 12-14]. These findings challenge us to rethink the design and management of nursing homes.

Nursing home residents are old, multimorbid, immunocompromised and frail – thus, the most vulnerable to COVID-19 complications. Most residents suffer from moderate-severe dementia, which means that they do not understand the meaning of social isolation. In spring 2020, European nursing homes were locked down and visitors were banned. All group-based cultural and exercise activities were eliminated [2,15], and common spaces such as dining rooms were used as little as possible. This probably limited the spread of infection, and the EUGMS guidance is also based on the same principles to prevent entrance and spread of the virus: active testing among residents, staff and visitors, and isolating subjects who either have symptoms or have been in contact with infected subjects [9]. All new residents should be isolated for 14 days and tested as RT-PCR negative before contact with other residents is allowed. The paper highlights hygiene, personal protective equipment including facemasks, face shields, gowns, and gloves, and social distancing. The article also gives practical advice on how to deal with new confirmed cases of COVID-19: how to organize zoning of nursing homes and staff into teams to work exclusively within COVID-19 and non-COVID-19 residents.

After a long quarantine, it has become obvious that social isolation and quarantine also have adverse effects. Residents suffer from loneliness, depression and anxiety [2,16]. Pausing group activities, especially exercise and outdoor activities, has exacerbated development of sarcopenia, frailty, and disabilities [17]. The consequence is accelerated cognitive decline [2]. The risks of prolonged isolation should be evaluated against the COVID risks. The EUGMS guidance to prepare European long-term care facilities for COVID-19 [9] emphasizes that the risk-benefit ratio of various actions should be evaluated. There are means to help residents and their loved ones to combat loneliness: telephone and video calls as well as digital tablets can be used to enhance contacts between residents and their relatives and friends [2,18], and between older people's groups[19]; video conferences can be organized between residents, staff and physicians [9]. In Finland, visitors were supervised and provided with personal protective equipment, and met residents

outside or in specially equipped meeting buses with protective shields. Exercise may also be supervised via video or using specific programs such as MATCH [9], and even group activities may be allowed when social distancing can be guaranteed [2].

The EUGMS guidance also underscores the need for advance care planning and good quality of end-of-life care [9]. Many facilities banned relatives' visits to dying COVD-19 patients during the first wave. As early as the beginning of April 2020, Finnish Geriatricians made a public statement that relatives should be allowed to visit and say their good-byes to their dying loved ones. The EUGMS guidance suggests that separate rooms be organized for dying residents to enable relatives to visit [9].

Finally, the pandemic has diverted medical professionals' attention from care of chronic diseases and rehabilitation to COVID-19. The medical care debt has increased during the pandemic. The shortage of resources is extremely challenging, and policies should allow flexibility for care providers and staff to meet the demands of resident care. The facilities may be managed in a situation where carers are on sick leave or in quarantine, and substitutes are difficult to obtain or also represent a risk for residents. The pandemic, bereavement at their patients dying, and feelings of inadequacy to help the patients may have detrimental effects on the mental health of carers in nursing homes [5]. The staff in nursing homes should be supported and allowed reflection to alleviate their emotional burden.

Geriatricians and geriatric expertise are needed more than ever in European nursing homes.

Kaisu H Pitkala, M.D., Ph. D., professor University of Helsinki, Department of General Practice and Primary Health Care and Helsinki University Hospital, Unit of Primary Health Care PO Bo x20 00014 University of Helsinki email: kaisu. pitkala@helsinki.fi

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