Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Pragmatic Innovations in Post-Acute and Long-Term Care Medicine
Feasible new, practical products or approaches intended to improve outcomes or processes in post-acute or long-term care

Reducing Social Isolation of Seniors during COVID-19 through Medical Student Telephone Contact

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A B S T R A C T

Social isolation has been associated with many adverse health outcomes in older adults. We describe a phone call outreach program in which health care professional student volunteers phoned older adults, living in long-term care facilities and the community, at risk of social isolation during the COVID-19 pandemic. Conversation topics were related to coping, including fears or insecurities, isolation, and sources of support; health; and personal topics such as family and friends, hobbies, and life experiences. Student volunteers felt the calls were impactful both for the students and for the seniors, and call recipients expressed appreciation for receiving the calls and for the physicians who referred them for a call. This phone outreach strategy is easily generalizable and can be adopted by medical schools to leverage students to connect to socially isolated seniors in numerous settings.

Keywords: Social isolation, COVID-19, Medical education, Telehealth

Significance

Social isolation, a quantitative loss in a person's social relationships, is common in older adults, with 27% of adults aged ≥60 years living alone.[1,2] During the COVID-19 pandemic, social distancing has been an essential public health strategy.[3] Although many older adults entered independent living communities for activities and socialization, they have been advised to remain in their own apartments or rooms. Meals are delivered to doors, activities have stopped, exercise rooms have closed, and visitors are restricted. These necessary stay-at-home measures unfortunately increase social isolation.

Social isolation has been associated with adverse health outcomes including increased risk of falls, all-cause mortality, hospitalizations, and cognitive decline, as well as unhealthy behaviors like physical inactivity and poor diet.[4,5] Additionally, in the previous SARS pandemic, isolating infection control practices were associated with increased depression and traumatic stress response symptoms.[6] Social isolation has been associated with less infection resistance, more emergency admissions to hospital, and extended length of stay, factors that may lead to worse outcomes during the COVID-19 pandemic.[7–10]

Given the effects on the mental and physical health of older people, interventions targeting social isolation are necessary to mitigate risk of increased morbidity and of infection from COVID-19.[11,12] Information and communication technology strategies show promise in reducing social isolation in older people, with literature demonstrating a positive impact of a telephone befriending program on older adults' perceived health and well-being.[13,14]

Innovation

We created a phone call outreach program, Seniors Overcoming Social Isolation (SOS), in which medical and health professions student volunteers (eg, MD, MD/PhD, Neuroscience, Genetic Counseling) called older adults, living in long-term-care facilities (LTCFs) and the community, at risk of social isolation during COVID-19. The SOS program entailed providers identifying at-risk older adults and then referring the contact information to coordinators who would then pass the info to student volunteers. Student volunteers were provided with an introduction script and a series of conversation starters, general social history questions, and well-being questions (eg, resource needs, groceries) to ask the older adult. Students then phoned the older adults when they had free time available. The goals were (1) to provide companionship and resources for unmet needs of older adults while (2) fostering health professional students' skills in communicating and understanding the needs of older adults in their community. We propose that social phone calls to older adults may reduce social isolation while providing meaningful engagement with the community and a learning experience for students.

Implementation

Older adults at risk for increased social isolation during COVID-19 were identified by their primary care provider or community center coordinator and enrolled in the SOS program. The SOS program coordinator (medical student) sent an e-mail invitation to the first-year medical school list server (approximately 150 students) seeking student volunteers. Volunteers signed up via an online form and then were assigned older adults to contact through their secure university e-mail. Volunteers were provided with educational reading on geriatric-specific issues and asked to follow a sample script that suggested topics of conversation, including well-being, coping, social

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Table 1
Content Discussed During Seniors Overcoming Social Isolation (SOS) Calls

Themes	Representative Quotations
COVID-19	Some of their current health issues and their fears about coronavirus
Social isolation and coping	How shelter in place has affected her social interactions
Family and friends	Who is helping them with their needs right now, their grandchildren
Living situation	Her current situation in her assisted living facility, how she is being supported by her daughter and her doctor
Technology	How the patients' new google device is helping her
Past	Discussed patients' career/family when he was a child
Health issues and physician appointments	How her day is; she feels some shoulder pain
Insecurities (eg, food, finances)	If she was experiencing food and housing insecurity
Polite (eg, weather, hobbies)	Travel cancellation, books she's reading
Appreciation	How he appreciates the call and is very appreciative of doctor

supports, and daily activities. The Institutional Review Board deemed this research exempt.

Evaluation

Student volunteers completed a postcall online survey describing the content, self-reflection, and perceived impact of the call. Three authors (E.E.O., M.S.R., L.A.L.) analyzed responses using constant comparative techniques. They independently assessed participant responses for focal themes and convened to compare and compile findings and create a preliminary list of categories and major themes. Identified themes were refined, with coders triangulating their perspectives and resolving any identified discrepancies through discussion. In no cases were the coders unable to reach consensus. The coders organized the content into relevant themes. Descriptive statistics were used to analyze participant surveys.

Results

Fourteen volunteers made 25 phone calls, averaging a length of 8.3 min (standard deviation 4.0). Nearly all volunteers (85.7%) were in medical school (MD or MD/PhD program), and most of those students were in their first year of medical school (75%). There were 2 graduate health program students (eg, medical geneticist and neuroscientist programs) who heard about the program through word of mouth. Volunteers were predominantly female (92.9%) and identified as Asian or white (50% and 43%, respectively).

Both conversational and COVID-19–related themes were discussed during calls (Table 1). Topics related to COVID-19 included health, fears, isolation, coping, and sources of support, whereas other prominent topics ranged from family and friends, to hobbies, to the older adult's past. In addition to providing social connection, several students assisted in addressing unmet needs by referring the older adults to sources of support.

Most students felt that the calls were well received; recipients expressed appreciation both for the calls or callers and for those who referred them (Table 2). Some students felt that the call was less impactful, and one felt that they had disrupted the older adult by calling. Student volunteers indicated they had plans to contact a little more than a third of older adults (36%) again. We do not have data about follow-up phone calls.

After the telephone contact, many students felt positive and empowered; one described feeling inspired by the older adult's story, and several reflected on the senior's appreciation. Other students acknowledged challenges, such as needing patience and talking about different topics than normally discussed with younger adults (Table 3).

Discussion and Comment

During the COVID-19 pandemic, requisite social isolation is a critical problem among older adults living in assisted and independent living communities. There is ample evidence that this is an important problem desperately needing intervention.

To reduce social isolation, we present a practical intervention leveraging health profession graduate students contacting older adults and residents of independent and assisted living by phone. Our results show that it is feasible and has bidirectional benefits for both student callers and older adult residents. Students felt empowered and that they were able to make a difference in the lives of socially isolated seniors. Results also showed that they were learning how to be patient and to slow down in conversations with hearing-impaired seniors, specifically learning important tenets of geriatrics in the process. Older adults appreciated and enjoyed receiving calls, as they were likely interrupting their social isolation.

Limitations of this study include the small sample size, single location, and referral of older adults by a provider. Although conducted in a single location (Chicago), COVID-19 was widespread and existed in most of the area's long-term-care communities necessitating isolation. Several students struggled to contact their assigned older adults, potentially because of illness or hospitalizations. This intervention depends on student volunteerism; as classes resume, fewer students may have time to participate. Moreover, this requires

Table 2
Perceived Impact of the SOS Call on Older Adults

Themes	Representative Quotations
Patient enjoyment and appreciated	- I think the patient was really happy to have someone to talk to for a bit. - I think the patient was happy that someone called. - I think it was nice for the patient. They seemed eager to share their current situation and were overall quite upbeat, though they said they're not really a "phone person." - He seemed appreciative of the call and looking forward to future calls from me.
Perceived too short	- We actually would have talked for longer, but the patient said her throat was getting tired.
Unclear if replaced physician visit	- She wasn't sure why we called since she talked to her doctor last week.
Provided resources	- I passed on information to someone who could maybe help.
Unsure or minimal	- Minimal, but not zero. I think the patient was still happy to know that her doctor is looking out for her.

Table 3
Self-Contemplation of Student Volunteers Making SOS Calls

Themes	Representative Quotations
Positive	- I felt great. - Overall I felt more positive after the conversation. - Inspired to learn about the patient's story!
Empowered Making a difference	- Empowered that these calls make a difference, - I'm happy to finally be doing something to make a difference in the COVID-19 outbreak - I felt like I was able to do something small with just 10 minutes of my day, and I could hear the appreciation in his voice. I felt very fulfilled by this small act.
Contacting again	- Plan to call again next week
Comfort level	- It felt strange to ask about the social factors.
Learning geriatric issues	- I'm learning that I need to have more patience in future conversations with geriatrics patients. Talking to older patients on the phone means that I need to allow them more time to answer, especially if they have any sort of cognitive impairments.
Neutral	- Not uncomfortable, but not like I had made a huge difference.

coordination of providers in identifying appropriate older adults, student volunteering, and a coordinator assigning seniors to call. Although online sign-ups limit some of the workload, a dedicated volunteer student coordinator is necessary.

Seniors Overcoming Social Isolation calls are easily generalizable and can be adopted by most medical schools to connect students to socially isolated seniors in multiple settings. For further generalization, student volunteer groups do not need to be in the same area as those being contacted. Medical schools can partner with rural communities or low-income areas who do not have direct academic partnerships to reduce isolation in hard-to-reach areas. During the COVID-19 pandemic, this simple innovation has been shown to be a feasible route for improving the lives of both older adults and students.

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The pragmatic innovation described in this article may need to be modified for use by others; in addition, strong evidence does not yet exist regarding efficacy or effectiveness. Therefore, successful implementation and outcomes cannot be assured. When necessary, administrative and legal review conducted with due diligence may be appropriate before implementing a pragmatic innovation.