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Geriatric Care and Related Challenges in Covid Era-Mini Review Article

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ABSTRACT

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), a type of novel virus caused by COVID-19 infection, killed hundreds of thousands of people across the globe. Owing to the multiple medical comorbid conditions already prevailing in most of the geriatric age group, they are prone to be at risk for poor outcomes and dreadful illness from COVID-19. Safest way to provide necessary medical care to population amidst fear of spread of pandemic is telemedicine. This includes consultations made by video phone calls. This review aimed to probe this vital aspect in the current literature about the experience of delivery of geriatric primary care via telemedicine.

Keywords: COVID-19; Geriatrics; Health policy; Pandemic; Telemedicine

Introduction

COVID-19 spread started from Wuhan, China in the winter months of 2019 [1,2]. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), a type of novel virus caused by COVID-19 infection, killed hundreds of thousands of people across the globe. Studies revealed that approximately more than three-fourths of the deaths occurred in those over 65 years of age [2,3]. Owing to the multiple medical comorbid conditions already prevailing in most of this age group people, they are prone to be at risk for poor outcomes and dreadful illness from COVID-19 [1-3]. The COVID-19 pandemic had deep effect on the healthcare dynamics and operational activities. This also involved the much important department of Geriatric care. Keeping in view the hazard

of spread during the pandemic time, social distancing has become an essential part of safety measures across the world in order to mitigate dispersal of SARS-CoV-2. This basically aimed at halting propagation and increasing spread of SARS-CoV-2 infections in the general population [2-4]. Recommendations regarding the old age group, from the Centers for Disease Control and Prevention, stressed on limited in-person interactions with others, especially indoors [4-6]. Other essential measures included wearing masks and ensuring good hand hygiene [7-9]. These safety considerations resulted in demand for implementing safe distancing measures for outdoor patient care, such as remolding of waiting areas to create safe distancing between patients, limiting crowding in closed areas, managing justifiably the waiting times and persuading patients to wait outside premises of the hospital or clinic wherever feasible. Safest way to provide necessary medical care to population amidst fear of spread of pandemic is telemedicine. This includes consultations made by video phone calls [8-11]. This review aimed to probe this vital aspect in the current literature about the experience of delivery of geriatric primary care via telemedicine.

Methods

We searched PubMed, and Medline database publications using: COVID-19, Geriatric, pandemic; and telemedicine clinics. The publications included were special communications, reviews, books, and research studies regarding the subject matter over the last two and a half years.

Discussion

A person infected with COVID-19 show mild symptoms similar to common cold-like illness, on the contrary, moderate to severe symptoms may lead up to acute respiratory distress syndrome that might be fatal [10-12]. Various steps have been introduced to avert exposure to the virus. These safety measures involved repeated hand washing using soap or an alcohol-based hand sanitizer, keeping away from touching unwashed hands to the mouth, nose and eyes [11-14]. As older people have lesser access to technology and may lack efficiency in utilization of devices [12-14]. Reasons behind this are high prevalence of cognitive and sensory deficits in older population that hinders the use of technology [13-15]. There are few strategies to adopt telehealth services such as direct installation of telehealth equipment in patients' homes (it may be an expensive option). Hub-and-spokes models, is another telehealth model where there are central "hub" points to provide telemedicine consultation to "spoke" sites (infrastructure/facilities) that are equipped with telemedicine accessories [14-17]. In literature it was observed that telemedicine care via phone or video can be a feasible option for geriatric primary care services not only during the pandemic but also in normal days [17,18]. Utilization of such a technology can be worth owing to a high patient and provider satisfaction. During the precarious times of the COVID-19 pandemic, an opportunity to deliver telemedicine to frail and elder communities flourished [17-19]. One study revealed that telephone visits had similar rates of advance care planning outcomes as compared to those in video visits. It was assumed that probably patients' family and caregivers, rather than the patients themselves, could have set up the portal to communicate with patients' medical teams on their behalf. This support from family members of frail elderly patients can help in telehealth care and social distancing measures [18-21]. One important observation regarding the video conference consult could give important social information inherent with to face-to-face interaction [21,22]. Social distancing likely had exacerbated the impact of social isolation resulting from mobility limitation in this group of older adults. COVID-pandemic resulted in social distancing and lock downs leading to lower engagement in face-to-face social interaction in clinical setups [22,23]. Video-conferencing was efficient in solving such issues raised by the lock downs. In addition to this, older adults supposedly found the experience of video-conferencing more user friendly and satisfactory [22-24]. In video calls, the health care providers along with the patients and their families paid more attention to the telehealth discussion, on the contrary, the degree of attention was lesser in the telephonic consultations.

There are a few challenges in the use of tele healthcare in any population. Most importantly, it is the motivation manifested by patients and their families to learn and improve their operation of the mobile apps, which is an essential prerequisite for smooth and effective telehealth care delivery. It is vital, especially to make telehealth more beneficial in older adults [21-23]. Other challenges include poor infrastructure in few developing countries. For example, few good centers have tried to develop stroke-specific protocols that can be adhered to by other centers in the management of stroke patient in the current pandemic. The commencement of tele stroke assessment of patients in the stroke clinic can be much helpful in screening suspected cases of stroke in the emergency department. It is vital to note that in developing countries, there is lack of tele stroke clinics, shortage of trained stroke staff and limited finances to deal with demands of tele stroke clinic. Lack of rehabilitation team involvement in the follow up treatment of such cases is due to shortage of PPE or fear of exposure to infection [24-27]. So, highly specialized telehealth care in geriatric patients such as tele stroke care needs proper training and infrastructure, which is responsibility of the health regulatory authorities of government. Providers, patients, and health care providers showed high degree of contentment over the time efficiency, travel time and costs saved, due to the virtual visits. The older patients, often have mobility issues and may need help of others to accompany them in case of in-person visits. However, as said earlier, there is variation in the caregiver's access to technology in different regions with varied

virtual health care outcomes as well as satisfaction. There is scope for virtual clinic to expand more to provide telehealth services to the geriatric patients especially in times of lock downs and pandemics [26-28].

Conclusion

Telemedicine can potentially help a lot in delivering health care services to the frail elderly community, especially in times of lockdowns and pandemics. There is still a need for a lot of improvement in telemedicine which if covered can be much beneficial for elderly age patients' care.

Conflict of Interest

None.

References

1. Shahid Z, Kalayanamitra R, McClafferty B, Douglas Kepko, Devyani Ramgobin, et al. (2020) COVID-19 and older adults: what we know. J Am Geriatri Soc 68(5): 926-929.
2. Gentry MT, Lapid MI, Rummans TA (2019) Geriatric telepsychiatry: systematic review and policy considerations. Am J Geriatr Psychiatry 27(2): 109-127.
3. Bowry R, Parker SA, Yamal JM, Hwang H, Appana S, et al. (2018) Time to decision and treatment with tPA (tissue-type plasminogen activator) using telemedicine versus an onboard neurologist on a mobile stroke unit. Stroke 49: 1528-1530.
4. Demaerschalk BM, Berg J, Chong BW, Gross H, Nystrom K, et al. (2017) American Telemedicine Association: telestroke guidelines. Telemed J E-Health 23(5): 376-389.
5. Iqbal N, Gulzar R, Riaz A, Iqbal A, Nadeem M, et al. (2021) Utility of Telemedicine in Pediatric Urology Clinic during Covid-19 Era-Mini Review. EC Paediatrics 10: 57-61.
6. Moo LR, Gately ME, Jafri Z, Steven D Shirk (2020) Home-based video telemedicine for dementia management. Clin Gerontol 43(2): 193-203.
7. Koo JR, Cook AR, Park M, Yinxiaohe Sun, Haoyang Sun, et al. (2020) Interventions to mitigate early spread of SARS-CoV-2 in Singapore: a modelling study. Lancet Infect Dis 20(6): 678-688.
8. Lavezzo E, Franchin E, Ciavarella C, Gina Cuomo-Dannenburg, Luisa Barzon, et al. (2020) Suppression of COVID-19 outbreak in the municipality of Vo, Italy. medRxiv.
9. Zhou F, Yu T, Du R, Fan G, Liu Y, et al. (2020) Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. Lancet 395(10229): 1054-1062.
10. Ge H, Wang X, Yuan X, Gong Xiao, Chengzhi Wang, et al. (2020) The epidemiology and clinical information about COVID-19. Eur J Clin Microbiol Infect Dis 39(6): 1011-1019.
11. Wong SH, Lui RN, Sung JJ (2020) Covid-19 and the digestive system. J Gastroenterol Hepatol 35(5): 744-748.
12. Yang X, Yu Y, Xu J, Shu H, Xia Ja, et al. (2020) Clinical course and outcomes of critically ill patients with SARS-CoV-2 pneumonia in Wuhan, China: a single-centered, retrospective, observational study. Lancet Respir Med 8(5): 475-481.
13. Wölfel R, Corman VM, Guggemos W, et al. (2020) Virological assessment of hospitalized patients with COVID-2019. Nature 581: 465-469.
14. Delello JA, McWhorter RR (2015) Reducing the digital divide: connecting older adults to iPad technology. J Appl Gerontol 36(1): 3-28.
15. Alvseike, Brønnick (2012) Feasibility of the iPad as a hub for smart house technology in the elderly; effects of cognition, selfefficacy, and technology experience. J Multidiscip Health 5: 299-306.
16. Choi NG, Hegel MT, Marti CN, Mary Lynn Marinucci, Leslie Sirrianni, et al. (2014) Telehealth problem solving therapy for depressed low-income homebound older adults. Am J Geriatr Psychiatry 22: 263-271.
17. Heinz M, Martin P, Margrett JA, Mary Yearns, Warren Franke, et al. (2013) Perceptions of technology among older adults. J Gerontol Nurs 39: 42-51.
18. Hsiao V, Chandereng T, Lankton RL, Jeffrey A Huebner, Jeffrey J Baltus, et al. (2021) Disparities in Telemedicine Access: A Cross-Sectional Study of a Newly Established Infrastructure during the COVID-19 Pandemic. Appl Clin Inform 12(3): 445-458.
19. Nicol GE, Piccirillo JF, Mulsant BH, Lenze EJ (2020) Action at a Distance: Geriatric Research during a Pandemic. J Am Geriatr Soc 68(5): 922-925.
20. Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, et al. (2009) Research electronic data capture (REDCap)--a metadata-driven methodology and workflow process for providing translational research informatics support. J Biomed Inform 42(2): 377-381.
21. Dewar S, Lee PG, Suh TT, Min L (2020) Uptake of Virtual Visits in A Geriatric Primary Care Clinic During the COVID-19 Pandemic. J Am Geriatr Soc 68(7): 1392-1394.
22. Vaismoradi M, Turunen H, Bondas T (2013) Content analysis and thematic analysis: implications for conducting a qualitative descriptive study. Nurs Health Sci 15(3): 398-405.
23. Choi NG, DiNitto DM (2013) The digital divide among low-income homebound older adults: internet use patterns, eHealth literacy, and attitudes toward computer/Internet use. J Med Internet Res 15(5): e93.
24. Powers BB, Homer MC, Morone N, Edmonds N, Rossi MI (2017) Creation of an Interprofessional Teledementia Clinic for Rural Veterans: Preliminary Data. J Am Geriatr Soc 65(5): 1092-1099.
25. Al Hashmi AM, Ozdemir AO, Shuaib A, Al-Jehani H, Mansour OY, et al. (2020) Current Recommendations for the Management of Stroke Patients in the Middle East in the Era of COVID-19 Pandemic; Statement from the MENA SINO. J Stroke Cerebrovasc Dis 29(11): 105181.
26. Goyal M, Menon BK, Van Zwam WH, Dippel DW, Mitchell PJ, et al. (2016) HERMES Collaborators. Endovascular thrombectomy after large-vessel ischaemic stroke: a meta-analysis of individual patient data from five randomised trials. Lancet 387: 1723-1731.
27. Iqbal S, Hasan A, Gill B S, Taseer A R, Iqbal A, et al. (2021) Telemedicine in Stroke Clinic during the COVID Era and the Challenges in Patient Management: Review Article. J Biol Today's World 10(3): 001-003.
28. Shachar C, Engel J, Elwyn G (2020) Implications for Telehealth in a Postpandemic Future: Regulatory and Privacy Issues. JAMA 323(23): 2375-2376.

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