

Usage of Information and Communication Devices by Older Adult Couples During Covid19 Pandemic

By

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Abstract

Information and communication devices played a great role in the lockdown period by helping to stay connected with people and maintaining the social order. Older adults (60+) were considered as one of the drastically effected populations during this pandemic. This enquiry studies about the usage of information and communication devices by older adults, those whose who are living alone, during the Covid- 19 pandemic. The study looks into the ability of using, entertainment, shopping, communication and service of older adults. The participants of the study were from Kondazhy Grampanchayath in the state of Kerala. A quantitative approach has been followed in the study. The descriptive design helped to describe the usage of ICT enabled services by older adults during the Covid pandemic lockdown. Non-probability sampling technique has been used to obtain a sampling size of 60. Survey method was adopted as data collection method and a couple interview schedule has been used as tool for data collection. The collected data were analyzed using descriptive statistics. The study helped to understand about the usage of information and communication devices by older adults and its effect on their life during the period of lockdown. The result would help us to conduct further studies in the area of skill enhancement of older adults.

Keywords: Older adults, Information and communication devices, COVID-19

Introduction

The use of technology has made our lives easier as almost everything around us is accessible with the use of some innovative technologies. It was evident that, lockdown has brought more loneliness and more exposure to technological adaptations and helped us to lead the everyday life normally. As online became the new normal, the perspectives of older adults were also changed. The older adults have been the late users in the world of technology compared to their younger generations, but their shift to digital world is progressive. The smartphone ownership among older adults varies according to their age. Around 59 percent of older adults among the category of young old (60- 69) have smartphones and at the same time, 49 percent of old-old category (70-79) are using it. Facebook is the favorite social media among the elderly for being connected with their friends and family (Singh et al., 2018). The impact of Covid-19 on older adults has been affected on different levels such as social isolation, financial problems, psychological issues, abuse and neglect. They have been shut in their homes with lonelier and more time in their houses. The buying of groceries was difficult and they also live in the fear of illness (Grolli et al., 2021). News about suicides were also heard in plenty. As everyone were socializing virtually, the older adults were finding it difficult to be in contact with friends and family through technology (Martins Van Jaarsveld, 2020). The lockdown has brought more loneliness and more exposure to technology. There is fact that older adults do not appear to be interested in information and communication devices as such, but instead they are more likely to use technology if they feel they have a reason for using them (Hur, 2016). Most of the time older adults feel frustrated and less confident when it comes to the use of devices. Many of them depend on their children and majorly on their grandchildren for using mobile phones. But Covid-19 has tend them to change the dependency pattern in the information and communication devices.

In the study conducted in Netherlands, older adults have been the worst affected by lockdown measures including increased anxiety, depression and they are the least beneficiaries of digital technology. The Covid-19 has increased the digital divide among the older adults (Martins,2020). A study conducted by Kuo et al. (2016) enquires about the use of technology in older adult's home care services. It was found that the system was useful in improving the home care services including care management, care scheduling, tour planning etc. There is another set of study reveals that the active usage of smartphones in the older adults are delaying neurological decline and smartening the brain. The memory function is improved as well as technology can be used for the treatment of disability, stimulating activities and facilitating communication. Smartphones also play a vital role in tackling the boredom of the older adults (Shete et al.,2020). Telemedicine and online consultation for older adults was another area of development during the period of Covid-19. It witnessed a global bloom during this breakout (Owen, 2021). Smith (2014), conducted a study on adaptation of new technologies by older adults. The study revealed that many seniors remain isolated from digital life. The result stated that younger population, who are highly educated used more technology and had a positive view towards the technology. At the same time the older adults mainly with health issues or disability feels disconnected from digital tools and services. The research conducted by Moore and Hancock (2020), stated that the virus has induced loneliness and social distancing. Different digital Medias like networking cities, video chat and online games have helped the people to stay connected during this time. The article discusses about some of the disadvantages of older adults including, less access to technology when compared with younger generation. The disparity in digital skills makes them feel skeptical in the use of digital things. The small screen of smartphones makes it difficult for touching and their eyesight also negatively affect them. The older adults also get targeted by misinformation and fraud. Lack of guidance and instructions, high cost, less confidence and knowledge about technology and also the health

barriers of old age play as the barriers for older adults in using information and communication technologies. The technology is considered as too much complex when compared with younger generations and this leads to less communication and social interaction. These were from the point of view from the older adults yet they showcased willingness to adopt to new technologies (Vaportzis et al., 2017).

Based the review two main research questions have been framed

- How efficient was the older adults in use the information and communication devices during Covid-19 period?
- How frequent was the use of information and communication devices by the older adults during Covid-19 period?

Methodology

Descriptive research design was employed in this study with a quantitative research approach. Purposive sampling was used where the list of older adults was collected from the Anganwadi workers of Kondazhy grampanchayath, Kerala. The participants for the study are older adult couples from 60 years and above, who live alone by themselves. From the collected list the researcher found out the will potential participants. A total of 60 respondents including older adult couples living alone coming under the age group of 60 years and above was collected using purposive sampling. The researcher visited each respondent at their house and interviewed them and collected their responses. The tool used for data collection was a couple interview schedule. The schedule includes the major variables such as socioeconomic background, entertainment, shopping, communication and service. Descriptive statistics was used for the analyzing the data in the study. All the participants were treated under ethical guidelines. The study includes the people that comes under the category of vulnerable population and it does not include sensitive issues.

Result and Discussion

The result and discussion of the study has been described as two parts. Firstly, the context of the study and main results were explained. In the second part, the findings of the study were described concerning its relationship with previous studies.

Socioeconomic background

The socioeconomic questions were added in order to know whether there is any relation with socio-demographic details and the usage of information and communication devices by older adults living along. The socio-demographic questions include gender, religion, educational qualification, occupation and income, number of vehicles, rooms and children, and also about the insurance support available for them. From the age of the respondents, it is shown that majority of them belongs to 60-64 age group, that is 30percent, which is followed by 70-74 age group. There is very less representation from the 85-89 age group. Looking on to the educational qualification of the older adults it is seen that all have done their basic education till 10th standard. Because 51.7 percent of the participants had a government job and also from the pension scheme of government, pension is the main source of income for them. Many of them at least have two vehicles and lives in 3 roomed houses. Which shows that they have a good living condition.

ICD for Entertainment purpose

On an average the older adults spend minimum 2 hours using information and communication devices. Devices like mobile phones, television and radio are the mostly used ICD for entertainment purpose, in which 95percent uses mobile phones for entertainment needs. This shows that mobile phone is the most accessible devices for all the population. There are many apps available in mobile phones like WhatsApp and Facebook from which, 81.7percent uses WhatsApp, 68.3percent uses YouTube and 41.7percent uses Facebook account for entertainment purpose. The older adults have access to new applications like Instagram and telegram. This shows that the older adults have access to all types of social media accounts. Elderly people spent minimum of 4 hours per day for ICD and in their leisure time, 50percent of the participants engage themselves in gardening. It keeps them active during the day. 48.3percent of the participants watch television. They involve themselves in outdoor activities as it keeps them healthy and it helps in happy ageing. Hobbies like reading and writing can also be seen in the participants. When asked about the changes they have felt after they used ICD majority responded that ICD has brought a good change in their life. It has made the information availability very fast, but 3.3percent of the participants have shared that ICD has reduced the physical relationship as it has made everything online. This shows that many have accepted ICD as a part of their life but some are not able to accept the technology as a complete boon.

ICD for Shopping Purpose

Different ICDs like mobile phones, desktop and laptops are used for shopping purpose and 68.3 percent of the participants uses mobile phone for shopping things. Different websites for example amazon, flipcart, myntra, meesho etc... are the mostly used and it is understood that amazon website is more famous among the older adults. 45percent used amazon for buying things. For older adults' medicines are their daily needs because of their health issues and thus 6.7percent uses Med life pharmacy for purchasing medicines. But from analyzing the participants use of ICD, it is understood that many of them uses mobile phones to order things, but not through websites. Many of them does telephonic shopping. Things like grocery, stationary items, electronics and dress materials are bought by using ICD. Majority of the older adults do not prefer online shopping. The main reason was, they don't trust the quality of the online products. Different factors like their health and pandemic situation have made them use ICD more. Learning to use ICD needs external help and many of them have taken help from their children and grandchildren and from the communication part, it is understood that they use ICD for communicating with their children and grandchildren the most.

ICD for Communication purpose

Communication is the basic function of ICD and from the research it is understood that 95percent of the participants used mobile phone for communication. They use ICD for talking with their children, grandchildren, friends and family. This keeps them engaged and helps them to recover their loneliness. Various methods like phone call, video call and texting were used by the participants, but majority prefer phone call over all the other methods. This can be connected with their response towards the difficulties faced by them. It was found that 80percent of the participants have social media accounts and 20percent do not have. Out of which WhatsApp is mostly used by them. WhatsApp is used to text and video call with their children and relatives. Facebook is another mostly used social media. This helps them to connect with old friends and see posts in facebook.

ICD for Different Services

Everything is going online and digital. Different services like payment of water bill, electricity bill, bank transaction, religious ceremonies etc... have gone online. Significant

proportion of the respondents uses mobile phone as their service platform, that is 66.7percent because mobile phones are developing day by day increasing their efficiency in doing things. It can be seen that many of the older adults started uses the information and communication devices from the past 2 years, that is when the Covid 19 pandemic started and the people were forced to isolate themselves. 26.7percent of them started using ICD as a service platform from the past one year and 15.0percent used ICD from the past 2 years. But it is noted that comparing to the other functions, 26.7percent of the participants do not use any ICD for accessing different services. They do not consider information and communication devices as an alternative. Majority of the participants uses ICD for paying pay their water bill and electricity bill using mobile phones. 40percent use ICD for bank transactions. Water bill and electricity bills are the basic recurring payment of a house hold and the older adults have started using ICD for that. The religious practices also where provided through online platforms like television and YouTube. 66.7percent of them have used the ICD for religious needs and different religious ceremonies like marriages, funerals, holy mass, religious talk etc were attended by the participants. The results revealed that 35percent of them have attended holy mass and 28.3percent of them attended marriage functions and 31.7percent of the participants have attended religious talks during covid period using information and communication devices.

Relationship with previous studies

The adaptation to technologies has been a challenging activity for older adults. (Singh et al., 2018). This research revealed that Covid pandemic has accelerated the process of adaptation. This study also agrees with the result that mobile phones have influenced the activities like shopping, socializing, health related procedures etc...but it must be noted that the digital divide is decreasing among older adults. Older adults have more perceived isolation when compared with other categories. The constant use of ICT was positively affecting the social support, social isolation and social connectedness (Chen & Schulz, 2016). The results of this study also positively correlate with this study as older adults spends their time using ICD for entertainment and communication purpose. While comparing a study by Bosamia, it is stated that the technology had impacted our daily activities, social networking, education, health, shopping and commerce, banking and employment. This study has some similarities as the results show that older adults is using ICD for communication, entertainment, shopping and for other services. A statement can be seen in this research which is similar to the statement, “this has also led to decrease in face-to-face interaction, social disconnection and increased health issues (Bosamia, 2013). According to Smith (2014), adoption of new technologies is increasing among the older adult population but many seniors remain isolated from digital life. From this research it is understood that majority of the older adults are using ICD for different purposes and there is only minority who has no access to technologies.

Conclusion

In the state of Kerala, the percentage of older adults are high when compared to all other states in India. The usage of technological advancement is also considered as needed one. By conducting this research, it is understood that from the past 2 years, many of the older adults have started using information and communication devices for different purposes due to Covid. Though Covid-19 restricted the social movements, the elderly tends to learn new technology with the support of various information communication devices. The results of this study would pay the way to accelerate the online services to older adults in the near future.

References

- Arthanat, S. (2019). Promoting information communication technology adoption and acceptance for aging-in-place: A randomized controlled trial. *Journal of Applied Gerontology*, 40(5), 471–480. <https://doi.org/10.1177/0733464819891045>
- Balasundaram, P., Libu, G., George, C., & Chandy, A. (2020). Study on the effect of COVID-19 lockdown on health care and psychosocial aspects of older adults in Kerala State. *Journal of the Indian Academy of Geriatrics*, 16(3), 101. https://doi.org/10.4103/jiag.jiag_3_20
- Bennett, B. (2019). Technology, ageing and human rights: Challenges for an ageing world. *International Journal of Law and Psychiatry* 6, 101449. <https://doi.org/10.1016/j.ijlp.2019.10149>
- Bosamia, M. (2013, December). (PDF) Positive and negative impacts of information and communication technology in our everyday life. ResearchGate. https://www.researchgate.net/publication/325570282_Positive_and_Negative_Impacts_of_Information_and_Communication_Technology_in_our_Everyday_Life
- Burnette, D., Morrow-Howell, N., & Chen, L. M. (2003). Setting Priorities for Gerontological Social Work Research: A National Delphi Study. *The Gerontologist*, 43(6), 828–838. <https://doi.org/10.1093/geront/43.6.828>
- Chen, Y. R. R., & Schulz, P. J. (2016). The Effect of Information Communication Technology Interventions on Reducing Social Isolation in the Elderly: A Systematic Review. *Journal of Medical Internet Research*, 18(1), e18. <https://doi.org/10.2196/jmir.4596>
- Grolli, R. E., Mingoti, M. E. D., Bertollo, A. G., Luzardo, A. R., Quevedo, J., Réus, G. Z., & Ignácio, Z. M. (2021). Impact of COVID-19 in the Mental Health in Elderly: Psychological and Biological Updates. *Molecular Neurobiology*, 58(5), 1905–1916. <https://doi.org/10.1007/s12035-020-02249-x>
- Heart, T., & Kalderon, E. (2013). Older adults: Are they ready to adopt health-related ICT? *International Journal of Medical Informatics*, 82(11), e209–e231. <https://doi.org/10.1016/j.ijmedinf.2011.03.002>
- Hur, M. H. (2016). Empowering the older adults population through ICT-based activities: An empirical study of older adults in Korea. *Information Technology & People*, 29(2), 318–333. <https://doi.org/10.1108/ITP-03-2015-0052>.
- Kuo, M. H., Wang, S. L., & Chen, W. T. (2016). Using information and mobile technology improved older adult home care services. *Health Policy and Technology*, 5(2), 131–142. <https://doi.org/10.1016/j.hlpt.2016.02.004>
- Martins Van Jaarsveld, G. (2020). The effects of covid-19 among the older adult population: a case for closing the digital divide. *Frontiers in Psychiatry*, 11. <https://doi.org/10.3389/fpsy.2020.577427>
- Ministry of Statistics and Program Implementation, Government of India. (2021, July). Older adults in India 2021. http://mospi.nic.in/sites/default/files/publication_reports/Elderly%20in%20India%2021.pdf
- Mishra, R. (2020, August 4). Shodhganga@INFLIBNET: Role of mobile communication in rural development a study on imphal west district of manipur. Shodhganga : A Reservoir of Indian Theses @ INFLIBNET. <http://shodhganga.inflibnet.ac.in:8080/jspui/handle/10603/293348>
- Moore, R. C., & Hancock, J. T. (2020). Older adults, social technologies, and the coronavirus pandemic: challenges, strengths, and strategies for support. *Social Media + Society*, 6(3), 205630512094816. <https://doi.org/10.1177/2056305120948162>
- Moshrefjavadi, M. H., Rezaie Dolatabadi, H., Nourbakhsh, M., Poursaedi, A., & Asadollahi, A. (2012). An analysis of factors affecting on online shopping behavior

- ofconsumers. International Journal of Marketing Studies, 4(5).
<https://doi.org/10.5539/ijms.v4n5p81>
- Owen, P. (2021). Applying public health theory to practice in the context of the COVID-19pandemic. Primary Health Care. Published.
<https://doi.org/10.7748/phc.2021.e1730>
- Petrovcic, A., Boot, W. R., Burnik, T., & Dolnicar, V. (2019). Improving the measurement of older adults' mobile device proficiency: results and implications from a study of older adult smartphone users. IEEE Access, 7, 150412–150422.
<https://doi.org/10.1109/access.2019.2947765>
- Selwyn, N. (2004). The information aged: A qualitative study of older adults' use of information and communications technology. Journal of Aging Studies, 18(4), 369– 384.
<https://doi.org/10.1016/j.jaging.2004.06.008>
- Shete A, Mahajan GD, Garkal KD. Smart phone addiction and reaction time in geriatric population Natl J Integr Res Med 2020; Vol.11(5): 66-70
- Singh, S., Subramanyam, A., & Raut, N. (2018b). Mobile phone use in the elderly: Boon or bane? Journal of Geriatric Mental Health, 5(2), 81.
https://doi.org/10.4103/jgmh.jgmh_32_18
- Smith, A. (2014, April 3). Older adults and technology use. Pew Research Center: Internet, Science & Tech. <https://www.pewresearch.org/internet/2014/04/03/older-adults-and-technology-use/>
- Usmani, R. S. A., Saeed, A., & Tayyab, M. (2021). Role of ICT for community in education during covid-19. ICT Solutions for Improving Smart Communities in Asia, 125– 150. <https://doi.org/10.4018/978-1-7998-7114-9.ch006>
- Vaportzis, E., Giatsi Clausen, M., & Gow, A. J. (2017). Older adults perceptions of Technology and barriers to interacting with tablet computers: a focus group Study. Frontiers in Psychology, 8. <https://doi.org/10.3389/fpsyg.2017.01687>
- What is an “online platform”? (2019). An Introduction to Online Platforms and Their Role in the Digital Transformation, 19–26. <https://doi.org/10.1787/19e6a0f0-en>
- Yang, S., Fichman, P., Zhu, X., Sanfilippo, M., Li, S., & Fleischmann, K. R. (2020). The use of ICT during COVID -19. Proceedings of the Association for Information Science and Technology, 57(1). <https://doi.org/10.1002/pra2.297>
- Vijayarathy v. (2011). The entertainment and media industry in India a study with special reference to film and television segments in Tamilnadu. Handle.net. <https://doi.org/http://hdl.handle.net/10603/347610>
- Zastrow, Charles. (2007). Understanding Human Behavior and the Social Environment Seventh (7th) Edition, 12-14.