

NEW CHALLENGES FOR THE ELDERLY. A SOCIOLOGICAL REFLECTION ON SOCIALIZATION TO ICT'S AS AN OPPORTUNITY IN THE TIME OF THE COVID-19

CODRINA CSESZNEK*,
GIUSEPPINA CERSOSIMO**,
LUCIA LANDOLFI***

ABSTRACT

The article presents at only one month from the Covid19 pandemic explosion a sociological reflection about the changes undergone by older adult's in Italy and Romanian. The essay reveals as the ICT could be an opportunity by the older adult's in the era of the pandemic if they have been already socialized to the use of digital technologies. It is in fact, thanks to digital tools, that older people can remain at home, not suffering from COVID-19, and they can prolong a health condition using those kinds of platforms.

Keywords: aging, pandemic, Information Communication Technology, health care system.

INTRODUCTION

The 2020 was declared by the World Health Organization as the starting year of the “Decade of Healthy Ageing”, namely a decade that will be characterized by global actions carried out by governments, civil society, international agencies, professionals, academia, the media and the private sector in order to ensure Healthy Ageing.

To be honest, much has already been done to ensure this, particularly in recent years the technology has been adopted as means of “developing and maintaining the functional ability that allows wellbeing in older age” (WHO, 2015).

The current deep interest in older people by the World Health Organization comes from the awareness that the entire population is ageing at a faster pace than

* Ph.D., Professor Transilvania University of Brasov, e-mail: codrina.csesznek@unitbv.ro.

** Ph.D., Associate professor, University of Salerno, email: gcersosi@unisa.it.

*** M.A. University of Salerno.



in the past. In fact, according to the estimates of Eurostat in 2025 people over the age of 60 will form about one third of the population, with a very rapid increase of older adults over the age of 80. (Cersosimo) But, as Shakespeare in his comedy “Merchant of Venice” said, “all that glister is not gold” and a crucial point is that people are living longer but not healthier lives and the added years of older age are lived mainly in poor health. In fact, population aging will cause problems, and it is partially already doing so, for the economic, social and healthcare system.

Moreover, because of the retirement of the elderly from the professional and social spheres, changes in their economic status, loss of partners and friends due to death, social isolation is becoming more and more a crucial problem for older adults. Social isolation of older people is also caused by chronic disease which affect older population. In fact, as people live longer, chronic disease such as chronic cardiovascular disease, diabetes, osteoporosis, neurodegenerative disorders, chronic respiratory disorders, dementia and so on are increasing too and striking the aging population. This, together with aggravating factors appearing together with general deterioration of physical and cognitive abilities, such as increased risk of falls, fractures, disabilities, nutritional deterioration, comorbid neurological and cerebrovascular disorders, severe confusion syndrome and so on, will ensure that in the next years increasing age would be associated with increased health-care utilization, actually this is already happening.

One consequence of these health conditions and of the social exclusion is that extra years that accrue from longevity are considered as simply extending the period of retirement. Therefore, WHO with “Decade of Healthy Ageing” wants to build awareness among people that “First, even in circumstances in which older people have a significant loss of functioning, they still “have a life”. They have the right and deserve the freedom to realize their continuing aspirations to well-being, meaning and respect” (WHO, 2015, p. 128).

The purpose of this paper, even if in an explanatory way, is to reflect on how to guarantee and maintain the quality of life to elders using information and communication technologies in a period in which there is a world pandemic and they are particularly frail, out of touch, burdensome or dependent from other people. In this pandemic period technological literacy for the elderly can constitute a prevention and a protection element.

AGEING DURING THE ERA OF COVID-19

In the same year that the World Health Organization propelled healthy and active ageing, it had to deal with a pandemic. On the 11th of March 2020 chief of WHO, Adhanom Ghebreyesus, declared COVID-19 a pandemic. That day 118.000 people in 114 countries were infected (in Italy there where 12.462 infected), and 4.291 people lost their lives.

The number of infections and deaths has then increased, bringing down several countries of the world which have tried to stem the number of infections

following the Italian model of containment restrictions and to cure already infected people, trying to prevent the infection from causing pneumonia, severe acute respiratory syndrome, kidney failure and lead to death especially of those who already have health problems such as, precisely, the elderly.

It is in this historical period that older people have appeared more than ever as the most vulnerable members of society. Often already characterized by other chronic diseases older people's organism seems to be less able to survive the new corona virus. In fact, despite the restrictions put in place in Italy, the highest proportion of people who have died from COVID-19 are the elderly. The average age of patients who died in Italy positive to COVID-19 is 78 years (data updated to 26th of March) (ISS, 2020). This, as the chief of WHO also emphasized in his speech of the 20th of March, does not mean "young people are invincible". Although more able to defeat the virus if contracted, anyway they may be a source of infection.

In order to reduce the infections of a respiratory virus such as COVID-19, which spreads mainly through close contact with sick people, the best solution is reducing social relations to the bone, obviously not without consequences. Hence, the invitation to the people of the affected countries to stay at home.

"Stay at home" for older people is likely to result in reduced social relations, follow-up visits and medical examinations, lack of social support and help from informal caregivers, so loss of contact which can have serious consequences in their physical health and also in the no less important mental health as remaining at home could exacerbate the already isolated social situation of which the elderly often suffer. In Romania, for instance, during the emergency state, at the time of writing this article, elders are allowed to leave home only three hours a day (except only for serious medical situations).

COVID-19: ICT TO GUARANTEE HEALTHY AGEING

In the scenario described above, in a period of time when contact between people could create infections and consequent deaths of people, especially those who are already affected by other diseases, society seeks to focus on technology as a means of socialization to "stay at home" especially for those who are most vulnerable, namely the elderly. Defining technology as "the making, modification and the usage of tools, machines, techniques, systems, and methods of organization, in order to solve a problem, improving a pre-existing solution to a problem, achieve a goal, handle an applied input / output relation, or perform a specific function" (Schatzberg, 2006) so, it appears to be the best means of solving the current problems that the pandemic is causing.

It is in this period of necessary limitation of physical contact that Italy seems to have gained more awareness than ever of the importance of digital applied to different fields, especially that one of ageing. Older people, in fact, are encouraged

by initiatives like that one of “Solidarietà digitale” (in English “digital solidarity”) to use technological solutions in order to guarantee quality of life despite the difficult period (Solidarietà digitale, 2020).

The initiative over mentioned aims to reduce the social and economic impact caused by pandemic through providing services to people who have been called to change their habits for example by allowing them to work remotely through the use of smart working platforms, to keep up with school and training paths, to receive orders for food at home, to read the newspaper, to manage their shops on different sales channels, to access cultural content and so on and above all to monitor their health conditions.

In particular, Telehealth is presented as the best way when it comes to monitoring the physical health of the elderly.

Beyond what may be the specific definitions of telehealth, the compound word refers to health manageable at a distance and synonyms like telemedicine, e-health, connected health, can be used all as terms which, although in a different script, refer to the ICT application in the field of the healthcare system.

It is in fact, thanks to digital tools, that older people can find medical and social support not only directly related to the new corona virus but also and especially for their health in general.

Starting from platforms which are now more and more used to monitor patients who are in quarantine at home or patients suspected of being infected with COVID-19. But it is also and especially for older people at home, not suffering from COVID-19 and who want to continue to stay healthy that those kinds of platforms can be useful.

Indeed, through wearable device or even simply using technological tools prior to the time of the “all connected” of the Internet of Things the elderly can monitor their vital parameters such as blood pressure, blood glucose level etc and communicate these data to the doctor. They can, moreover, expose doubts, symptoms to the medical staff (often the platforms are equipped with community of medical personnel) and receive personalized answers for their state of health without having to move from home.

The platform, in fact, through the data entered by the user can create a real clinical documentation of the user that can be consulted by both doctors and patients, and in some cases also by those who are considered as informal caregiver.

Nowadays the use of platforms for the elderly means avoiding contacts and possible infections from COVID-19, in the long term this use will allow the passage from healthcare service to homecare service, avoiding cost and stress related to doctors’ appointments.

Encourage the use of medical platforms, consult via webcam, telephone calls to doctors together with the possibility of supplying medicines without going to the medical offices but through the form of an electronic recipe whose code is sent to the patient by email, SMS or social media, these are the steps that Italy is moving towards a more technological health system to face COVID-19.

In addition to those just mentioned before other technological strategies can assist the elderly in maintaining healthy and active state of health in a health system that seeks to be increasingly technological.

Starting from the so-called Assistive technologies “defined as an umbrella term for any device or system that allows an individual to perform a task, they would otherwise be unable to do or increases the ease and safety with which the task can be performed [...]. Assistive Technologies is any product or service designed to enable independence of disabled and older people (King’s Fund in Beech and Roberts, 2008). Assistive Technologies covers the range of aids and adaptations provided to assist people in the activities of daily living” (Dolnicar & Nagode, 2010, p. 1279). Of course, these technologies can be implemented in a myriad of scatter practices which are specific for needs of people. Actually, examples that help us to understand concretely how the life of the older people can improve thanks to the relationship between ICT and the health system are social alarms, telecare, home telehealth, ambient fall detection, connected kitchen, wearable device, apps, platforms like said before and so on.

In the so-called digital era is very applied the use of sensors placed inside the home of elderly people living alone, which thanks to the data they collect, can alert caregivers if necessary. These sensors allow the monitoring of elderly people’s behaviour, for example how many times a diabetic person opens the refrigerator, the movements that an elderly person makes in the house, how many times he uses the kitchen and if he or she uses it in the proper way and so on. Moreover, these sensors are increasingly being applied literally "to the elderly" through the use of so-called wearable devices.

These are just few examples of tools that are supposed to guarantee to the elderly independent living and less requirement of caregivers in general, and not only during this difficult period.

If the physical health of the elderly is currently the priority of countries affected by COVID-19, no less important is the mental one. Already often characterized by social isolation and a loss of relational networks due to the withdrawal from the world of work and the loss of loved ones and friends, the current suggestion of countries of staying at home exacerbates the already possible situations of depression of which often suffer the elderly. Again, the use of technological devices can provide older people with solutions to combat the onset of depression.

Actually, the simple use of smartphones, social media and online games can combat the sense of loneliness that affects them even more during this period. In some western Countries, today in the era of the COVID-19 the older people live autonomously thanks to the social media like WhatsApp or Facebook. Some Apps of their smartphones allow them to receive groceries at home, to video call their grandchildren and children, guaranteeing them a virtual social relationship useful for their well-being and their health protection. The usage of these applications can

be considered as meaningful activities done by older people, who are often alone and who are expected to sit and do nothing. The use of applications is having a positive impact on the personal development and emotional well-being of older people in this period where media informed them about the risks for them of the coronavirus if they leave own home.

In addition, using the internet allows them to have a means of information about what is happening around them.

A concrete example in receiving information can be messaging service launched by WHO with partners WhatsApp and Facebook. Through this service the elderly can interact with a bot. Starting the conversation with a simple “hi”, the bot will interact with the elderly person and answer all his questions related to COVID-19 with latest news coming from WHO (WHO, 2020).

NEED TO SOCIALIZE OLDER PEOPLE TO ICT

As we tried to explain so far in this period population ageing is anymore as a challenge for policymakers and for public health service. During this period, more than ever, society gained the awareness that trend of the population aging can only be addressed thanks to another trend that society are facing which is the diffusion of new technologies.

But the crucial point is that simply providing older adults with technological tools is not enough to embrace potentials of the technological advances thanks to which society could enhance health, abilities, social integration and active ageing.

Since older people have not spent their life “surrounded by and using computer, videogames, digital music players, video cams, cell phones, and all the other toys and tools of the digital age” (Prensky, 2001: 1) older people, defined by Prensky as Digital immigrants “like all immigrants, some better than others – to adapt to their environment, they always retain, to some degree, their “accent”, that is, their foot in the past (Prensky, 2001: 2). “The digital immigrant accent” in this case can be found in the elderly’s preference to go to the doctor in person preferring the face-to-face interaction with the doctor instead of the tele consult, or using the paper recipe to buy a drug and avoiding dematerialisation of the latter, or also visiting relatives instead of video calling them and a lot of other examples can be made.

Taking into consideration the above-mentioned Italian case, recent studies show that usage of Internet among older population is still low. In particular, 65% of people aged between 60 and 64 use the internet, and the percentage fall as the age increases. In fact, around 45% of people aged 65–74 claim to use the internet and only 13% of people over 75 use the internet (ISTAT).

While in Romania, for comparison, the percentage of people between 55–74 years old that used the Internet was 53,8% in 2018 (INS, 2018).

This scepticism, lead elderly to remain on the other side of the digital divide preventing them from enjoying the economic, social, sanitary benefits that the application of the ICT would bring for them.

In this sense new perspectives of the research coming help to describe the new trend about the socialization of the older people at new technologies.

Trying to understand the reason of elderly's scepticism toward use of ICT we refer to one of the mostly used theoretical framework to explain individual's acceptance of a particular system of new technology which is the Technology acceptance model (Davis, 1986). According to the Technology acceptance model (TAM) external factors impact on people's attitude towards use ICT and these attitudes to use or intention to use ICT are discovered to be driven by perceived usefulness and perceived ease of use (Jung & Berthon, 2009).

First of all, perceived usefulness of ICT is now more than ever unquestionable.

The usefulness of ICT applied in the field of ageing can clearly be grasped in the benefits that these bring from the point of view of the different stakeholders: for example informal caregivers would be alleviate perceiving that they can monitor their elderly loved ones even when they are not there, or also because they will be less required for medical examinations and so on; the health system would be characterized by a lower demand for care and consequently economic development; doctors, reduced the number of face-to-face interactions with patients, could give more attention to emergencies; last but actually the first beneficiaries, the elderly, who, as highlighted by various gerotechnological studies, would experience more support and less social isolation (Czaja, Boot, Charness, Rogers, & Sharit, 2017). Without going too deep and borrowing other studies we can divide into three main categories these benefits: increase in quality of care, greater economic efficiency and quality of life (Dolnicar & Nagode, 2010).

These benefits are demonstrating, today more than ever, the usefulness of ICT in maintaining good quality of life for older people.

So, if usefulness of ICT can be considered almost totally perceived, even if in the most dramatically way, on the other hand ease of use of ICT is still a relevant problem for the application of ICT to the ageing.

Since the elderly "have based all their learning on linear analogue media (books) where the user's intervention does not change the content and the user is not responsible for organizing the information, but rather consumes it in the order provided by the author" (Castilla *et al.*, 2018, p. 25), when they use information and communication technologies which are interactive and require active involvement of the user, they are afraid of getting lost. Perceiving difficult to use often prevent elderly from using information and communication technologies (Czaja, Boot, Charness, Rogers, & Sharit, 2017).

Our paper shows that having a positive individual attitude the older population is reported to increase the willingness to learn to use ICTs (Siren & Knudsen, 2017).

As showed Castilla *et al.* in particular, prior positive experiences with ICTs are linked to a higher perceived utility (Castilla *et al.*, 2018), while experiencing difficulties usually reduces older adults' self-confidence in relation to ICTs (Wilson, 2018).

Of course, our research has basically an explorative function the topic, but highlights state that individuals with prior positive experiences in seeking information are more willing to adopt social media and see the opportunity for the future services. Moreover, a greater confidence with digital media is correlated with prior working experiences with ICTs (Mikkola & Halonen, 2011). The different meanings attached to ICTs are influenced by prior experiences with digital technologies. Another influence is given others' attitudes toward digital technologies are reported to influence individuals' ICTs use (Mikkola & Halonen, 2011; Wilson, 2018).

In last years many studies have verified the efficacy of any potential solutions to reduce forms of digital divide among older adults. Most of them are intervention research evaluating digital training among older adults. Researches are then focused on a specific device like a tablet (Gatti, Brivio, & Galimberti, 2017) or a smartphone (Heis, Machado, & Behar, 2016); m-health (Islind & Lundh Snis, 2017) or digital gaming (Seah, Kaufman, Sauv e, & Zhang, 2018); on particular forms of digital training.

Thanks to these trainings older participants increased confidence in using ICT (Vaportzis, Clausen & Gow, 2018) and felt like they can handle it.

When trained in using a particular device, older adults indicate it as easy to use and declare of feeling comfortable in using it demonstrating their capability to learn (Czaja, Boot, Charness, Rogers, & Sharit, 2017).

Therefore, training for ICT use, as shown by the above studies, would determine perception of ease to use technology which, together with the growing awareness of the usefulness of ICT could certainly determine an increase in the use of ICT by older people.

CONCLUSION

So, after these considerations it is easy to assume that in this period when the elderly in a country like Italy constitute the highest percentage of deaths from complications by COVID-19, the spread and contagion could have been contained if the elderly had already been literate to ICT. These informatics technologies could be allowing them to receive assistance only if and when really necessary, avoiding a number of social relationships who are at risk at this time.

On the other hand, this paper is not intended to be polemical, but aims to take note of the need to socialize older people to ICT since this can guarantee what the WHO proposed this year with the "Decade of Healthy Ageing".

If much has already been done so far much can still be done to overcome the stereotype of older people unable to use technological tools and present them instead as capable and willing to be part of the digital society.

A way of overcoming the so-called digital divide socializing the elderly to the use of ICT can be seen in intergenerational cooperation where younger instruct the older. This cooperation will improve not only technical skills among older adults, but also the quality of life among younger generation, since they will be less needed as informal caregivers for their relatives, and in addition this cooperation will strengthen relationships between generations (Dolnicar & Nagode, 2010).

Anyway, fundamental in the socialization to the digital tools is to put in the older people's shoes and understand the logic they use while using innovative means to keep themselves healthy and active.

Therefore, talking about intergenerational cooperation does not refer to informal relationship between older and younger people, but a real institutionalization of interventions. An example of these kind of interventions can be "Simbioza", a Slovenian project that consist of intergenerational cooperation which allows to transfer knowledge from young people to older people about the use of ICT (Simbioza, 2019).

This kind of cooperation will also avoid that the inappropriate usage of technologies would just exacerbate social exclusion and the marginal position of many older people. Such examples, if implemented earlier, would have ensured that older people would remain more at home, and consequently would have allowed them to avoid infections and consequent deaths at the time of COVID-19. Therefore, it is clear that ensuring an optimal technological environment for all aging people is a good opportunity to guarantee wellbeing in older age.

However, the use of ICT of older people seems to be more a social matter than a technical one. Therefore, understanding the needs of older people, their fears and desires must be the starting point for socializing older people to ICT.

Of course, these are simply assumptions coming from the current situation that society is experiencing.

So, with this article we tried to build a kind of overview from which future and more in-depth researches can be carried out considering the central role of the older people using information and communication technologies.

REFERENCES

1. *AgeingTech*. (n.d.). Retrieved from ageingtech.it: <http://www.ageingtech.it/>
2. Breck , B., Dennis, C., & Leedahl , S. (2018). Implementing reverse mentoring to address social isolation among older adults. *Journal of Gerontological Social Work* 61, 513–525.
3. Castilla, D., Botella, C., Miralles, I., Bretón-López, J., Dragomir-Davis, A., Zaragoza, I., & Garcia-Palacios, A. (2018). Teaching digital literacy skills to the elderly using a social network with linear navigation: A case study in a rural area. *International Journal of Human-Computer Studies* 118, 24–37.

4. Cersosimo, G. (n.d.). *Disuguaglianze, generazioni, corso di vita*.
5. Czaja, S., Boot, W., Charness, N., Rogers, W., & Sharit, J. (2017). Improving Social Support for Older Adults Through Technology: Findings From the PRISM Randomized Controlled Trial. *The Gerontological Society of America*, 1–11.
6. Davis, F. (1986). *A Technology Acceptance model for empirically testing new end-user information systems: Theory and results*. Doctoral Thesis. Massachusetts, Institute of Technology: Sloan School of Management.
7. Dolnicar, V., & Nagode, M. (2010). ASSISTIVE TECHNOLOGY FOR OLDER PEOPLE AND ITS POTENTIAL FOR INTERGENERATIONAL COOPERATION. *TEORIJA IN PRAKSA*.
8. Dolnicar, V., & Nagode, M. (2010). Overcoming key constraints on assistive technology uptake in Sloveni. *TEORIJA IN PRAKSA*, 1295–1314.
9. Gatti, F., Brivio, E., & Galimberti, C. (2017). “The future is ours too”: A training process to enable the learning perception and increase self-efficacy in the use of tablets in the elderly. *Educational Gerontology* 43, 209–224.
10. Heis, E., Machado, L., & Behar, P. (2016). The use of mobile devices for the elderly as a possibility for digital inclusion. 265–271.
11. Hunsaker, A., & Hargittai, E. (2018). A review of Internet use among older adults. *New Media & Society* 20, 3937–3954.
12. Isind, A., & Lundh Snis, U. (2017). Learning in home care: a digital artefact as a designated boundary object-in-use. *Journal of Workplace Learning* 29, 577–587.
13. ISS. (2020). *Characteristics of COVID-19 patients dying in Italy. Report based on available data on March 26*.
14. ISTAT. (n.d.). *AnzianiStat*. Retrieved from dati-anziani.istat.it: <http://dati-anziani.istat.it/Index.aspx?QueryId=15569>
15. Jung, M.-L., & Berthon, P. (2009). Fulfilling the promise: A model for delivering successful online health care. *Journal of Medical Marketing Vol.9*, 243–254.
16. Mikkola, K., & Halonen, R. (2011). “Nonsense” - ICT perceived by the elderly. 306–317.
17. Prensky, M. (2001). Digital Natives, Digital Immigrants. *On the Horizon* 9(5), 1–6.
18. Schatzberg, E. (2006). “Technik” Comes to America: Changing Meanings of “Technology” before 1930. *Technology and Culture, Vol. 47*, 486–512.
19. Seah, E., Kaufman, D., Sauv e, L., & Zhang, F. (2018). Play, Learn, Connect: Older Adults’ Experience With a Multiplayer, Educational, Digital Bingo Game. *Journal of Educational Computing Research* 56, 675–700.
20. *Simbioza*. (2019). Retrieved from simbioza.eu: <https://www.simbioza.eu/en/2019/>
21. Siren, A., & Knudsen, S. (2017). Older Adults and Emerging Digital Service Delivery: A Mixed Methods Study on Information and Communications Technology Use, Skills, and Attitudes. *Journal of Aging and Social Policy* 29, 35–50.
22. *Solidariet  digitale*. (2020). Retrieved from <https://solidarietadigitale.agid.gov.it/#/>
23. Vaportzis, E., Clausen, M., & Gow, A. (2018). Older Adults Experiences of Learning to Use Tablet Computers: A Mixed Methods Study. *Frontiers in Psychology*, 19.
24. WHO. (2015). *World report on ageing and health*. Luxembourg.
25. WHO. (2020). *WHO Health Alert brings COVID-19 facts to billions via WhatsApp*. Retrieved from www.who.int: <https://www.who.int/news-room/feature-stories/detail/who-health-alert-brings-covid-19-facts-to-billions-via-whatsapp>
26. WHO. (n.d.). *What is Healthy Ageing*. Retrieved from www.who.int: <https://www.who.int/ageing/healthy-ageing/en/>
27. Wilson, C. (2018). Is it love or loneliness? Exploring the impact of everyday digital technology use on the wellbeing of older adults. *Ageing and Society* 38, 1307–1331.
28. Wootton, R., Patil, N. G., Scott, R. E., & Ho, K. (2009). *Telehealth in the Developing World*. Royal Society of Medicine Press Ltd.
29. Zhang, J. (2016). Aging in cyberspace: Internet use and quality of life of older Chinese migrants. *Journal of Chinese Sociology* 3.