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Healthy ageing and digital technologies: promises and pitfalls

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Contribution to the temporary working group TWG3: Media communication and health

The TWG3 welcomes researchers from diverse fields sharing an interest in media, digital communication technologies and health. In this panel we have invited researchers from various disciplines e.g. media and communication studies, health science, education and cultural gerontology addressing burning issues in the expanding field of digital technology and healthy ageing. The panelists will highlight various contexts, the domestic sphere and the institutional care setting, in three Nordic countries. The papers explore individual and 'relational' media uses, paying particular attention to the oldest among the old persons' practices, experiences, and engagement with digital technologies and the consequences thereof, for better or worse, in sickness and in health. The demography in the Nordic countries is similar, and the proportion of people aged 75+ is steadily increasing. Yet there are important differences between the Nordic countries, in the implementation, and in the use of digital media technologies for the promotion of health and welfare. The TWG3 has so far not paid attention to the vast group of older citizens when critically discussing media, communication, and health. We want to give voice to the most senior citizens, make them visible and allow them more space in the conference program. The need for health care services increases and digital technologies have for some time been considered the way to make ends meet when resources are lacking. Research shows, however, that old people's use of digital technology decreases with age (König, Seifert, & Doh, 2018). But this is not the full and true picture. We need to learn more about this group in relation to the technological takeover and the consequences thereof.

Invited panelists:

- Päivi Rasi-Heikkinen, Professor, University of Lapland, Finland, paivi.rasi-heikkinen@ulapland.fi
- Anette Grønning Associate professor, University of Southern Denmark, ahg@sdu.dk & Amalie Søgaard Nielsen, Postdoc, University of Southern Denmark, amani@sdu.dk

- Fredrika Thelandersson Postdoc, Lund University, Sweden, fredrika.thelandersson@kom.lu.se & Helena Sandberg, Associate professor, Lund University Sweden, , helena.sandberg@kom.lu.se
- Hanna Varjakoski PhD candidate, University of Eastern Finland, hanna.varjakoski@uef.fi & Elisa Tiilikainen, Associate professor, University of Eastern Finland, elisa.tiilikainen@uef.fi

Abstract 1

Title: Autonomy in the contact with healthcare services from a nursing home perspective

Authors: Amalie Søgaard Nielsen & Anette Grønning, University of Southern Denmark

People living in nursing homes live there to receive support. Support related to daily routines, their health situation, and included herein: use of digital media and communication channels.

In the research project “Healthy aging in a digital world“, we investigate use of health-related media among the oldest old. In Denmark, 21% in the age 85–89 live in nursing homes (Danmarks Statistik, 2022). We therefore included people living in nursing homes to investigate the oldest old. This sub-study is based on interviews and observations at three nursing homes.

When people move into nursing homes, relevant decisions and information-seeking behavior are often handed to others, leaving citizen’s autonomy to be understood as relational as proposed by Sherwin & Winsby (2011). This applies to health decisions as well as the use of health-related media where “use by proxy” is often appreciated (Hänninen & Loustari, 2021). Interaction with healthcare services is not an individual matter, but consists of communication involving several institutions, citizen, and relatives. Preliminary results show how residents trust staff at the nursing home to deal with health-related issues exceeding the primary obligations of the staff. This includes how staff is expected to maintain dialogue with hospitals and general practitioners. This dialogue often implicates difficult transitions between sectors, and information aimed for the citizen is not always available for the staff at the nursing home. Often staff need to include residents’ relatives as proxies for the residents to be able to complete the tasks related to these transitions (Dreyer et al., 2009). The health-related media use becomes a common mission for both staff, residents, and relatives.

Based on the research question “How do practices affect the autonomy of the citizen and the health professionals’ daily work?“, we will present and discuss preliminary findings from our study focusing on practices regarding communication media in the interaction between healthcare services, nursing homes, citizen, and relatives.

References:

Danmarks Statistik. (2022). Pleje- og ældreboliger 2022. *Nyt fra Danmarks Statistik*, 2022, 3.

Dreyer, A., Forde, R., & Nortvedt, P. (2009). Autonomy at the end of life: Life-prolonging treatment in nursing homes—relatives' role in the decision-making process. *Journal of Medical Ethics*, 35(11), 672–677. <https://doi.org/10.1136/jme.2009.030668>

Hänninen, R., & Loustari, R. (2021). *Exploring heterogeneous ICT use among older adults: The warm experts' perspective*. <https://journals-sagepub-com.proxy1-bib.sdu.dk/doi/10.1177/1461444820917353>

Sherwin, S., & Winsby, M. (2011). A relational perspective on autonomy for older adults residing in nursing homes. *Health Expectations*, 14(2), 182–190. <https://doi.org/10.1111/j.1369-7625.2010.00638.x>

Abstract 2

Title: Seniors' creative ways of navigating the technological take over

Authors: Fredrika Thelandersson & Helena Sandberg, Lund University

The ageing populations of Scandinavia are growing rapidly and put extra burdens on the health care systems. Digital health and welfare services are presented as the solution (Erlingsdottir & Sandberg, 2019), but there is limited research on how this works.

This paper draws on a small set of interviews (<10) from the research project “Healthy Ageing in a Digital World” which examines how Swedish citizens aged 75+ engage with digital media technology in relation to their health. We build on previous research that complicates the categories of internet users and non-users (Rasi, 2018; Rasi-Heikkinen, 2022) to understand how seniors domesticate media technologies by creating their own practices of technology use (Couldry, 2012; Haddon, 2011).

Our preliminary results indicate that they are all engaged with digital media and more or less part of the “technological takeover”. But the ways in which they engage with digital media is not straightforward or done in the way that those behind health solutions have planned. For example, in Sweden 1177 is both the phone number and website where Swedish citizens can access their health records and book appointments with health care professionals. When our respondents have been asked to find a vaccination appointment, as part of a media go-along protocol (Møller Jørgensen, 2016), none of them have managed to successfully navigate the 1177-website for this purpose. Some tried hard but were unable to finish booking due to technical difficulties. Others only made a brief effort before giving up when they “got lost” after visiting the website. Several forgo using the website completely and prefer calling; one respondent chooses to physically visit her health care provider due to a Parkinson's diagnosis that makes it difficult typing and speaking.

Several of the respondents actively choose not to use the 1177-website, but this did not mean that they abstained completely from all technology. The respondents were often proficient at some aspects of digital media, while selectively avoiding others.

References:

- Couldry, N. (2012) *Media, society, world: social theory and digital media practice*. Cambridge: Polity.
- Erlingsdóttir, G. and Sandberg, H. (2019) *På tal om e-hälsa*. Studentlitteratur.
- Haddon, L. (2011) 'Domestication Analysis, Objects of Study, and the Centrality of Technologies in Everyday Life', *Canadian Journal of Communication*, 36(2), pp. 311-324. doi: 10.22230/CJC.2011V36N2A2322.
- Møller Jørgensen, K. (2016) The media go-along. Researching mobilities with media at hand. *Mediekultur: Journal of media and communication research*, 60, 32-49. <https://doi.org/10.7146/mediekultur.v32i60.22429>
- Rasi-Heikkinen, P. (2022) *Older People in a Digitalized Society. From Marginality to Agency*. Bingley: Emerald Publishing Limited. doi: 10.1108/9781803821672.
- Rasi, P. (2018) 'Internet Nonusers', in *The SAGE Encyclopedia of the Internet*. SAGE Publications, Inc. doi: 10.4135/9781473960367.

Abstract 3

Title: Preferences and wishes for digital health services: A case study of 75+ year-old urban-dwelling Finns

Authors: Hanna Varjakoski & Elisa Tiilikainen, University of Eastern Finland

Finland is often rendered as the global leader of digitalization. In the latest EU's digital performance comparison, Finland ranked first. However, the rapid digitalization has placed some groups at risk of digital exclusion, because not all have equal ability, access, or resources to use digital services which deepens the existing social and health inequalities. Older adults have been identified as the largest group facing challenges in using digital health services (Kaihlainen et al. 2022) and at risk of digital health exclusion (Poli, Kostakis & Barbarella 2021).

Existing research has shown that old-age digital health inclusion/exclusion is impacted by structural, environmental, socio-technical, and individual drivers (Poli, Kostakis & Barbarella 2021). In previous research individual drivers have often been examined from the perspective of individual characteristics and resources with a distinction between the use and non-use of digital health technologies. Less attention has been given to older persons' own preferences and wishes for the use and access of digital health services, and if these services are sufficient for their often complex health needs.

This presentation discusses the preliminary findings of *Healthy aging in a digital world* (HAIDI) research project in the Finnish context. The presentation will focus on 75+ year-old Finns' views and experiences by asking *what kind* and *what ways* older adults would

like/want to use digital health services. The data were collected in the spring 2023 by using individual interviews and observations, including elements of desired scenarios.

References:

Kaihlanen A-M. et al. (2022) Towards digital health equity – a qualitative study of the challenges experienced by vulnerable groups in using digital health services in the COVID-19 era. *BMC Health Services Research* 22:1.

Poli A., Kostatis I. & Barbarella F. (2021) Receiving care through digital health technologies: Drivers and implications of old-age digital health exclusion. In: K. Walsh., T. Scharf., S. Van Regenmortel and A. Wanka (Eds) *Social Exclusion in Later Life. Interdisciplinary and Policy Perspectives*. Cham: Springer.

Abstract 4

Title: Robots in the care of older people: Reflections from a learning researcher

Author: Päivi Rasi-Heikkinen, University of Lapland, Finland

Within the last decade or so, there has been a growing interest and belief in the potential of robotics to reshape health care and social care, including home care for older people. Care robots are used to assist older people's daily tasks, such as cleaning, eating, dressing, bathing, social interaction, entertainment, and medication taking. Furthermore, robots can provide instructions for the activities of daily life and safety, help monitor older people's behavior and health, and provide companionship and health-related advice.

However, the uptake of robotics in the care of older people is not without problems. From the learning perspective, it requires new kind of digital literacies from both older clients and care professionals, and these cannot be taken for granted. Robots can be considered the next new digital media because they function as providers of information and services, requiring older people to have robot literacy, that is, the competences to understand and interact with robots. In addition, there are numerous other concerns related to the use of robotics in older people's care such as equality, acceptability, accessibility, ethics and agency.

This presentation discusses the uptake of robotics in older people's care through two research and development projects: 1) HARVEST—eHealth and ageing in rural areas: Transforming everyday life, digital competences and technology (2018–2021, funded by Academy of Finland), and 2) ArcticRobo—Development environment for Lapland's well-being robotics (2023-2025, funded by European Regional Development Fund). In particular, the presentation will focus on older clients' and care professionals' conceptions and lived experiences of interacting with a robot, and their robot literacy in the context of care.

References:

Suto, H. (2013). Robot literacy. An approach for sharing society with intelligent robots. *International Journal of Cyber Society and Education*, 6(2), 139-144.

Van Aerschot, L., & Parviainen, J. (2020). Robots responding to care needs? A multitasking care robot pursued for 25 years, available products offer simple entertainment and instrumental assistance. *Ethics and Information Technology*, 22, 247–256.