Caring is Sharing – Exploiting the Value in Data for Health and Innovation
M. Hägglund et al. (Eds.)

doi:10.3233/SHTI230192

Digital Skills Among Elderly Care Workers

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Abstract. The aim of our study was to determine the current status of digital skills of elderly care workers (n=169) at well-being services. A survey was sent to elderly services providers in the municipalities (n=15) of North Savo, Finland. Respondents' experience as client information systems users was higher than that as assistive technologies users. Devices supporting independent living were seldom used, but safety devices and alarm monitoring were used daily.

Keywords. Elderly care, digital skills, client information system, assistive technology

1. Introduction

Due to demographic changes, developed countries have growing concerns about the future challenges ageing populations will present to their welfare systems [1]. Digitalization and assistive technologies (AT) have been introduced as important means of meeting these challenges. AT is used to support not only the elderly but also elderly care workers, such as: registered nurses (RN) and practical nurses (PN) [2,3]. Client information systems (CISs) are technological systems for processing, storing, and maintaining social welfare client information and documents. However, support for CISs in social work and its knowledge generation has been shown to be poor [4]. The aim of this study was to identify the digital skills of elderly care workers at well-being services in Finland.

2. Methods

An electronic questionnaire was sent to elderly care services of the municipalities (n =15/19) of North Savo autumn 2022. The questionnaire included background and multichoice questions, and three open questions. A five-point (5) Likert scale (strongly agree-strongly disagree) was used to examine variations in the use and competence of workers' digital skills. The data (n=169) was analyzed using IBM SPSS 27 to explore the respondents' CIS and AT experience, and digital skills including motivation to use digital services at work. For the analysis the original five-point scale was changed to a three-point (3) scale (agree-neither agree nor disagree-disagree).

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3. Results

Respondents' mean age was 41 years and their working experience was wide (less than one year – more than 25 years). Nearly half (46%, n=77) worked in home care (HC), about 40% (n=70) in elderly care homes (ECH), and the rest in customer and service counselling (10%, n=16). Over half (59%, n=99) of the respondents were licensed PNs and slightly over one fifth (n=35) were RNs. Nearly 40% assessed their experience as a CIS user to be moderate (3/5, n=66) and over half assessed themselves as relatively experienced or experienced (4-5/5, n=88). Respondents were less experienced AT users (4-5/5, n=57). AT user experience was for HC workers (3.2/5) and for ECH workers (2.7/5). Respondents' digital skills and motivation can be seen in table 1.

Table 1. Digital skills and motivation*

	ECH (n=70) n / %	HC (n=77) n / %
I can search information from my organization's intranet	63 / 90	64 / 83
I know how to act as per data protection and security principles	**67 / 96**	**73 / 95**
I am motivated to develop my digital skills	61 / 87	65 / 84
I can evaluate the reliability of information I have searched	67 / 96	70 / 91
I can search for information from databases	64 / 91	67 / 87
I am motivated to use digital devices at my work	**55 / 79**	**63 / 82**
I can act according to ethical principles when I use digital services	68 / 97	71 / 92

ECH = Elderly Care Home, HC = Home Care, * = including "agree"-responses

4. Discussion

Digitalization and an increasing number of technologies aiming to support citizens' ability to live at home has raised concerns over care workers' digital skills and attitudes towards it [1,2]. Elderly care workers experience as CIS users was high, reflecting the wide implementation of electronic systems in Finnish social and health care [3,4]. In HC they used different kinds of digital devices, and they were confident with AT. A positive sign was the respondents' motivation to use digital devices and to adopt new ones.

5. Conclusion

Motivation to use digital services was high which refers to favorable situation for training digital technologies. Respondents working in HC were more confident with their CIS and AT experience than respondents in ECH. This study was funded by the European Social Fund (ESF), project code: S22852.

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