

# Future prospects for dignity in care in the era of nursing-care robots

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With recent advancements in robot technology, the use of robots has increased in the care services. Robots may contribute to improving the safety, quality, and efficiency of health care (Cresswell, Cunningham-Burley, & Sheikh, 2018). Several studies have reported that for staff members, the labor burden of promoting care was reduced when incorporating the use of care robots (Coco, Kangasniemi, & Rantanen, 2018; Huisman & Kort, 2019; Lee et al., 2018). With this relief in mind, in the field of nursing care the use of robots is receiving attention, as it can provide one component in dealing with the manpower shortage that arises from worldwide aging populations. Especially in Japan, which has the highest aging rate in the world, as well as continued development of robots, the potential use of care robots has become an important pillar of social policy (Japanese Cabinet Office, 2020). Social policy aims to resolve social issues through adding new assets created by innovation, and robot-supported caregiving is expected to extend healthy life expectancy and to reduce social costs.

Of course, it is important to provide dignified care for the elderly (Igai, 2020; Šaňáková & Čáp, 2019; Shotton & Seedhouse, 1998). Previous studies have shown that human dignity in care is described in terms of “the experience of the receiver,” and that care providers can unconsciously undermine the dignity of the care receiver (Shotton & Seedhouse, 1998). Thus, it is necessary to consider how to maintain the dignity of care receivers in an era of widespread use of care robots.

Recently we conducted interview research for nursing-home residents, asking them about the dignity of care (Hasegawa & Ota, 2019). Some respondents described care by robots instead of care providers. They said that the hands of a robot are cold, even when giving the same care as a caregiver. No matter how gently the robot touched a person, it could not provide care with dignity.

*“As I am an old person, I like the warmth of skin. Robots may understand me by analyzing with their artificial intelligence, but their hands may not be as warm as human hands, right?”*

*“Normally humans, as you know, [their] blood is flowing and warm, but the robot is cold.”*

In addition, the following comments were obtained from another resident:

*“Robots don't seem to be able to communicate, they're robots. I want you not to let a robot do this. It's cold, and we cannot have a great understanding of each other. Yeah. Robots have no love. I can't feel like the robot and I have connected with each other.”*

As shown by Walsh and Kowanko (2002) and Matiti and Trorey (2008), dignity includes aspects of privacy protection or confidentiality, and these aspects would appear to be strengths for care robots. However, these interviews have demonstrated the importance of considering “care with warm hands” in promoting the use of care robots. Researchers need to publish research work regarding care by robots focusing on views of dignity for the upcoming era of robot care.

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## CONFLICT OF INTEREST

The authors declare there is no conflict of interest.

## AUTHORS' CONTRIBUTIONS

N.H. was involved in the conception of this study and drafted the manuscript; K.O. supervised the whole study process and critically reviewed the manuscript. Both authors read and approved the final manuscript.

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