

# Application Fields and Innovative Technologies

**Virtual Assistants and the Care of Loneliness in Primary Health Care: From “Cultural” Design to Professionals’ Representations** Mariano Juárez, L., Luengo Polo, J., Muñoz Ortega, V.A., Naharro Gil E., Rivero Jiménez, B. & Conde Caballero, D. *Gerontechnology* 25(s)

**Purpose** The 21st century has been defined as the century of loneliness [1], something that is beginning to be reflected in statistical data on this feeling: 13% of older European adults reported feeling lonely “most of the time” or “all the time” [2]. Biomedical literature in the health sciences has provided evidence showing how loneliness both precedes and results from various health problems, becoming comparable to other risk factors such as smoking, obesity, or high cholesterol [3,4]. Virtual assistants have emerged as an inevitable tool to address contemporary health challenges. In recent years, tools such as A.C.H.O. [5] have been developed, combining cultural adaptation to the aging population of rural areas with the ability to operate without an internet connection. This paper discusses the potential use of such virtual assistants to address contexts of loneliness and isolation—one of the major contemporary challenges for public health. **Method** On the basis of a narrative review of the literature, this paper presents several examples of the use of virtual assistants and other technological solutions to address situations of unwanted loneliness in the context of ageing. Technological solutions must be culturally adapted; however, their design should also involve health professionals. This communication presents the results of a qualitative study conducted with nurses from rural areas of Extremadura, Spain. The study examines the representations and underlying ideologies of these professionals regarding the use of technology in health programmes, with the aim of exploring their views on the routine integration of technological tools into their care practices. Fieldwork was carried out across six rural communities and two urban centres in the Spanish region of Extremadura, an area characterised by a significant proportion of older adults. Participant selection was purposive, organised to obtain a non-representative yet pluralistic sample that incorporated diversity across multiple categories, including rural and urban settings, gender, years of professional experience, and age. A total of 16 participants took part in the study, generating 34 hours of interview recordings, complemented by numerous informal conversations with nursing staff in different settings. **Results and Discussion** Most so-called “culturally adapted” designs focus primarily on attributes such as age or gender. However, it is essential to recognise that experiences of loneliness, as well as the mechanisms of adaptation and care, are deeply cultural. It is therefore necessary to integrate these social meanings into the design of technological interventions. Moreover, the perceptions of health professionals must also be considered, as they frequently approach such initiatives with scepticism, viewing them as a challenge to their professional roles. This study identified two core concerns: 1) a potential weakening of the nurse–patient relationship, including the loss of empathy and personal connection, and 2) risks related to patient data management and the protection of confidential information. Nursing professionals appear to exhibit a conservative *habitus*, favouring traditional modes of practice and showing resistance to the incorporation of new approaches. Several interviewees associated care delivery with face-to-face interaction and relational values such as empathy and closeness—qualities they perceived as incompatible with technological tools, which they described as cold and impersonal.

## References

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