

The role of intelligent assistive technology for empowering people with dementia: A scoping review

Hanan AboJabel¹,
Clara Löbe¹

*Department of Medical Ethics and History of Medicine, University Medical Center
Göttingen, Germany*

Objectives: Over the past decade, the idea has been promoted that intelligent assistive technology (IAT) can empower people with dementia (PwD). As a new area of inquiry, the concept of empowerment and impact of IAT in this context is still unclear. Therefore, we conducted a scoping review to examine the conceptualizing and measuring of empowerment, as well as to understand the impact of IAT on empowering PwD in the existing studies.

Method: A scoping review was performed in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, using the following databases: Pubmed, Cochrane Library, Web of Science, Science Direct, and Google Scholar.

Results: A total of 27 articles examining the empowerment of PwD via IAT met the inclusion criteria. Most had an interventional/experimental (45%) or cross-sectional design (40%). A little more than half (56%) were qualitative studies. We observed inconsistency in the conceptualization and measurement of the concept of empowerment in the included studies. The exact role of IAT in this context remains therefore somehow blurry. However, most of the studies suggest that IAT can empower people with mild/moderate dementia by enhancing their ability to live more independently and with privacy for a longer period of time.

Conclusions: The lack of unity in defining and measuring empowerment may delay progress in this area of research. Future research should focus on developing a clear definition of the concept, as well as developing a reliable and valid tool for measuring it.