

PO3.28 Effectiveness of technology-based interventions for People with Dementia (PwD)

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Background

Research has shown benefits of technology-based interventions for people with dementia (PwD) (Buettner et al. 2010), such as improvement in quality of life. Therefore, research has focused on cost-effective interventions aiming to improve PwD lives, through the use of technology, such as smart phones (Armstrong et al., 2010). Reviews have explored the effectiveness of such interventions for PwD up to 2010 (Ekeland et al., 2010); however, conclusions from recent systematic reviews and factors influencing the effectiveness of interventions for PwD are not summarised yet. A review of systematic reviews was conducted to summarise evidence on the effectiveness of technology-based interventions for PwD, as well as to explore factors influencing this effectiveness, such as different outcome variables and PwD characteristics.

Method

A systematic search was conducted using: Web of Science, PubMed, ScienceDirect, PsycINFO and the Cochrane Library.

Inclusion & Exclusion criteria

The literature search focused on systematic reviews, published from 2010 to date, exploring the effectiveness of technology-based interventions for PwD. Reviews for stakeholders from mixed populations (e.g. people with MCI) were excluded. The search strategy concluded to 10 reviews (Figure 1).

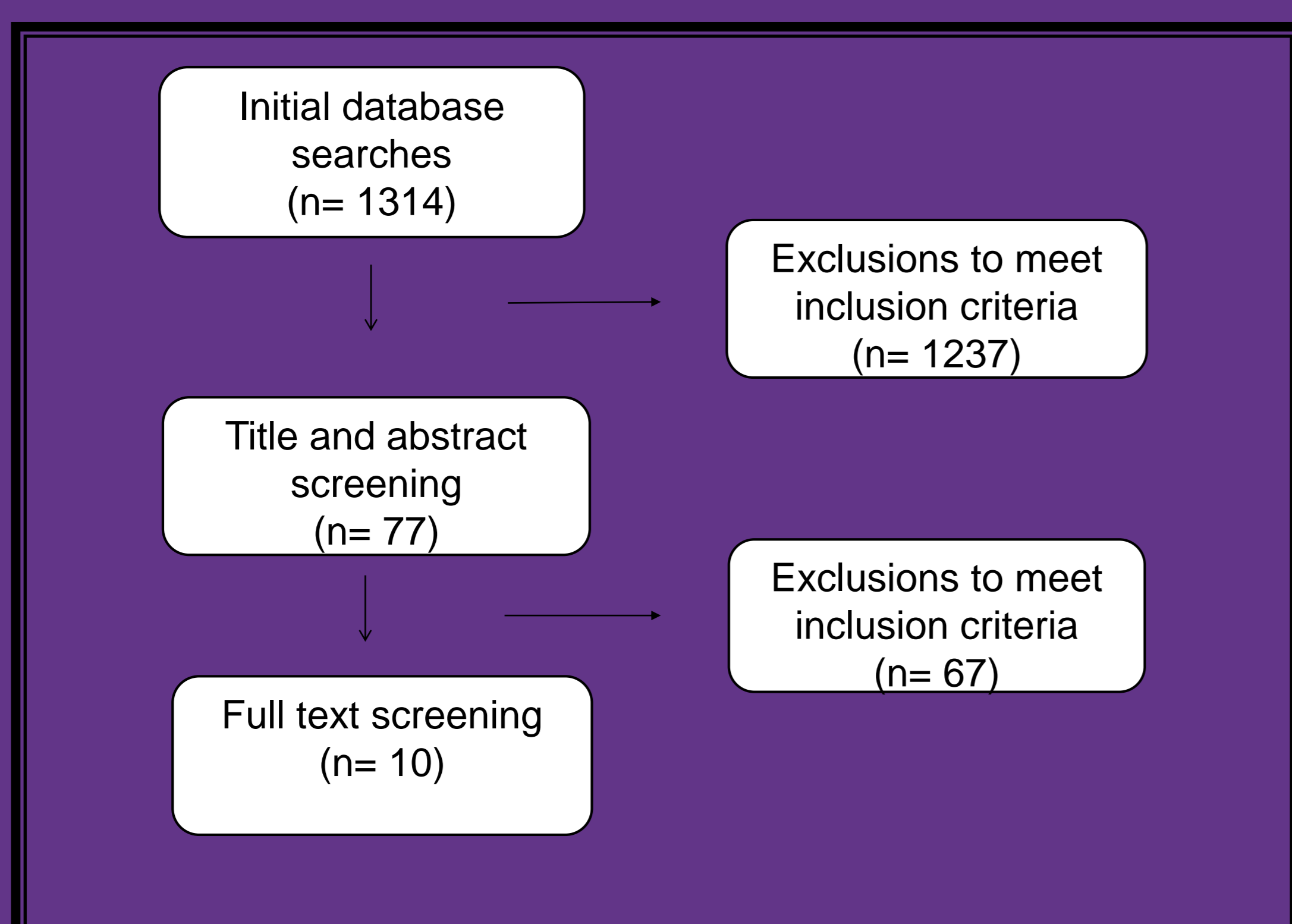
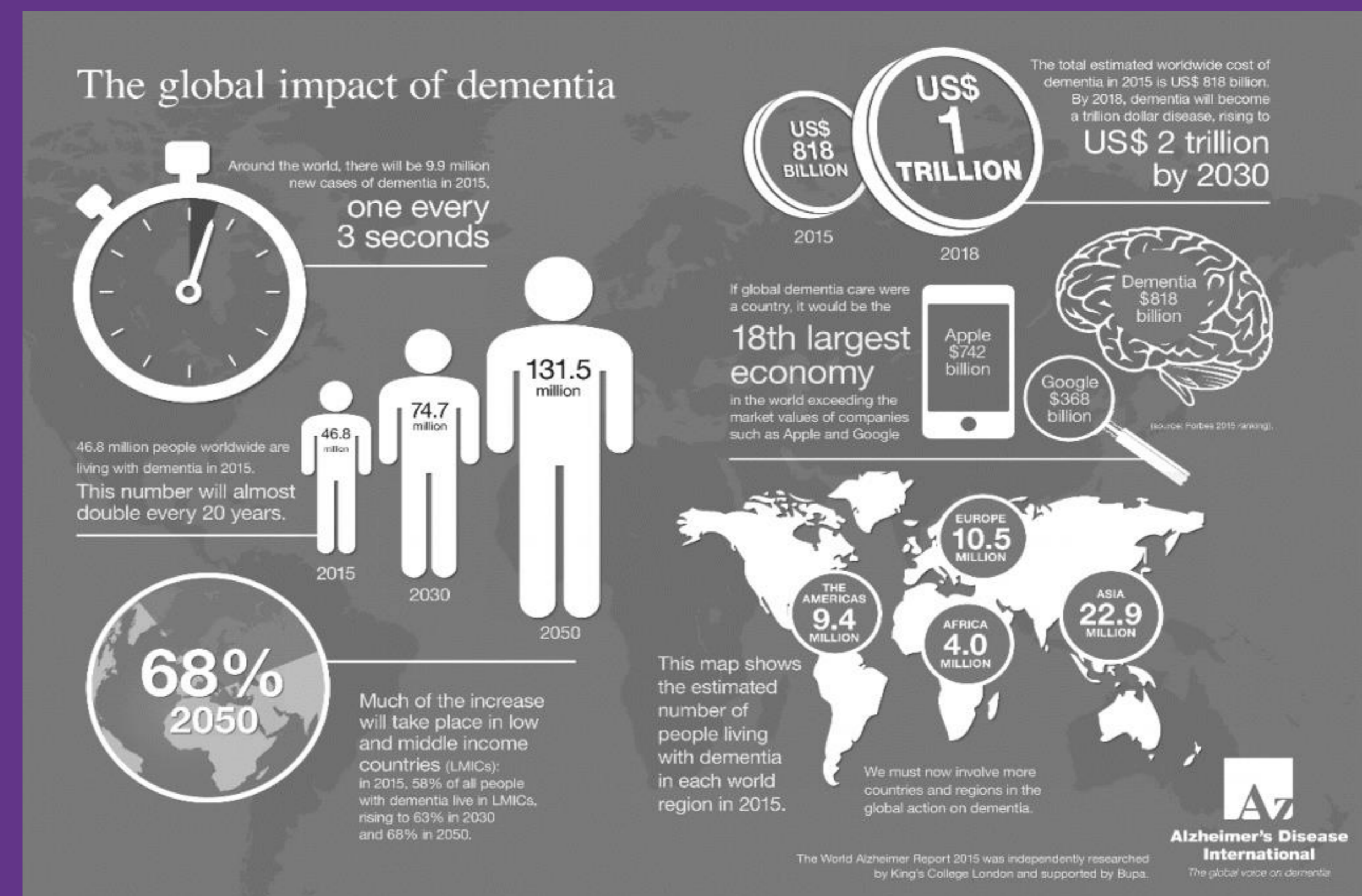


Figure 1. Search strategy



<http://caregiversprommd-project.eu/project-background/>

Results

Interventions, outcome variables and type of dementia for PwD varied across the reviews. Interventions ranged from computerised cognitive training programs to videoconferencing and smartphones. Outcome variables ranged from cognitive variables, such as episodic and working memory, to mood variables, such as depression and anxiety. The most common type of dementia included in the reviews was Alzheimer's disease, ranging from early to middle stages of the disease. Other conditions included vascular dementia and mild cognitive impairment. However, a significant amount of studies in the reviews did not report the type of dementia or the level of cognitive impairment.

Conclusions

The variety of interventions, outcome variables and types of dementia does not allow comparison between the reviews. A common conclusion from these reviews is that technology-based interventions can be effective. However, further research is needed to explore this effectiveness with larger sample sizes, longitudinal designs or greater range of outcome variables.

References

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