SUMMARY REPORT

Pilot evaluation of the effectiveness and feasibility of a personalised multimedia device for aged care residents with dementia

Dementia Collaborative Research Centre
Assessment and Better Care

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Disclaimer:

The views expressed in this work are the views of its author/s and not necessarily those of the Australian Government.

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PILOT EVALUATION OF THE EFFECTIVENESS AND FEASIBILITY OF A PERSONALISED MULTIMEDIA DEVICE FOR AGED CARE RESIDENTS WITH DEMENTIA

In recent years there has been increased attention paid to non-medical interventions to reduce the symptoms of agitation, depression and anxiety that are common among people with dementia. Previous research has indicated that music and audio-taped messages can reduce these symptoms, particularly if tailored to the preferences and interests of the individual with dementia. For example, Gerner (2000) found that music that participants had enjoyed earlier in life reduced agitation better than standard ‘relaxing’ classical music, while Garland and colleagues found that audiotapes of a family member’s voice worked better than the voice of a stranger (2007).

It seems likely, therefore, that people with dementia will benefit from access to a collection of personalised audio-visual material, such as favourite family photographs, music, movies, and videotaped family greetings. Unfortunately, people with marked dementia cannot easily use commercially available multimedia devices (e.g., DVDs, tablets, ‘smart’ phones and televisions) due to the complexity of these devices. Family carers are not always available to provide assistance and staff members in residential facilities are often too busy to help, thus limiting access to potentially therapeutic material.

MEMORY BOX: A PERSONALISED MULTIMEDIA DEVICE

To resolve these obstacles, our team at Monash University has developed a personalised multimedia device designed specifically for use by people with dementia, named ‘Memory Box’. It enables people with dementia to select and view the following media types: favourite music, movies, personal photographs and pre-recorded family messages. Memory Box is designed to be used autonomously by people with dementia, with an interface that can be simplified as the person moves to a more severe stage of illness.
IS MEMORY BOX EFFECTIVE AND FEASIBLE FOR USE IN AGED CARE?

Our team conducted a pilot trial of Memory Box, to determine if use of this device reduces symptoms of agitated behaviour, depression and anxiety among aged care residents with dementia, and also to determine if was feasible for use in residential facilities. Eleven aged care residents with dementia (nine women and two men, aged 76 to 95 years) had Memory Box installed in their personal rooms for a four-week period. At the end of the trial, there was a decrease in their symptoms of depression and anxiety and a slight reduction in agitation. While this is only a very small pilot study, these results are promising.

Interviews with the participating residents, their family members and facility staff indicated high levels of satisfaction with Memory Box. It was seen as engaging and enjoyable to use, with residents particularly welcoming the opportunity to access favourite music and photographs. Many shared the media on Memory Box with their family and staff members, providing an opportunity to reminiscence about the past and enhance social engagement. Our team is now further refining the device on the basis of our findings and hopes to conduct a larger study to further investigate the impact of Memory Box on the wellbeing of people with dementia.