Summary

Identifying and overcoming the obstacles to using empirically supported principles in the design of facilities for people with dementia

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Translating dementia research into practice
Identifying and overcoming the obstacles to using empirically supported principles in the design of facilities for people with dementia

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Introduction
There is substantial evidence-based information to inform the design of residential aged care facilities for people with dementia yet many appear to have been designed without clear application of the evidence base. This highlights a gap in the knowledge translation process, which has been characterised as involving 4 stages, these being awareness, agreement, adoption and adherence. This report identifies the stage at which such knowledge translation fails in the design of aged care facilities for people with dementia and provides recommendations to improve the situation.

Methods
Ten aged care facilities were audited using the Environmental Audit Tool (EAT) and rated according to the quality of the dementia environment. Senior managers and architects involved in the facility design were then interviewed to ascertain their knowledge of evidence-based principles of dementia design, their agreement with the principles and the nature of the obstacles to their implementation.

Discussion
The results of the telephone survey used to identify potential members of the sample suggest that approximately 5% of residential aged care facilities in the large metropolitan area surrounding Sydney have been involved in the development of new, or refurbished, accommodation for people with dementia in a two year period. If this figure is applied to the approximately 3,000 aged care facilities in Australia it suggests that in any one year the managers of 75 facilities, and their consultants, will be involved in designing for people with dementia. This is not a large number and provides a foundation for some optimism about the possibility of providing appropriate advice and support during this critical activity.

The Managers who agreed to be interviewed had considerable experience in services for people with dementia and the majority had a nursing background. They had commissioned architects who described themselves, with one exception, as specializing in the design of facilities for people with dementia.

The available data suggest that the architects involved in this study had a high level of awareness of the principles, although it should be borne in mind that this conclusion is based entirely on self-reporting. The awareness of the principles by five of the ten managers was described as low or partial. All of those who were aware of the principles agreed with them. There were some suggestions for minor additions to the principles, particularly concerning the interface of the facilities with the community.
The findings suggest that adoption of the principles was seen as being subject to a number of obstacles. The obstacles identified by the managers and the architects included restrictions imposed by either the site, or the nature of the facility being re-furbished. Only a small minority of managers saw regulations, pressure from relatives, corporate policies, industrial relations issues, mismatches between the design and the operational model as impeding the application of the principles. It is notable that the architects identified difficulties in coming to an agreement with the client on the brief as a significant obstacle. Here the poor knowledge base of the manager was seen as a key issue. Yet arguably the biggest obstacle to implementing a dementia friendly design relates to the knowledge of the principles among the managers. The EAT results clearly indicate that the combination of a manager who is aware of the principles, together with an architect who has a similar awareness results in a statistically significant impact on the quality of the dementia design. It is important to also note that whether or not the manager was a registered nurse had a significant impact on the results – with the RN managers performing better than their management colleagues who did not have this background. This suggests that a good awareness of the principles among managers of the aged care facilities results in their adoption, and that having a health professional background in this role is preferable. These findings have implications for the development of a strategy to improve the design of facilities. It may not be sufficient to educate architects alone, their application of the principles is clearly influenced by the clients’ (i.e. managers’) awareness of the principles and professional background.

With respect to the issue of building capacity to support knowledge transfer in dementia design principles there were mixed views among the respondents. Not surprisingly the managers were in favour of incorporating designing for people with dementia in the undergraduate curriculum of architects. Interestingly, most of the architect respondents regarded this as impractical because of what they believed was the specialised nature of dementia design. This is a concern given that the predicted explosion in the numbers of people with dementia within Australia and in residential aged care in particular, must result in dementia becoming a mainstream issue for architects and one which arguably, the discipline needs to engage with as soon as possible. This issue takes on added urgency given that no Australian school of architecture appears to address the broad area of designing for health services, let alone a specialized course on designing for people with dementia.

While there was a lack of agreement among the architect respondents of the need to foster evidence based dementia design within Schools of Architecture, there was strong support for education through an auditing and consultancy service. Without exception the managers and the architects valued the experience of discussing an evidence-based evaluation of their facilities and reported that it improved their understanding of the issues involved in designing for people with dementia. While this form of post occupancy evaluation was valued, the provision of a similar discussion, taking place during the planning stage, was thought to be likely to provide even greater benefits.

The fourth stage of Davis’s model, adherence, is often accomplished and maintained by the development of regulations. Not surprisingly the architect respondents were generally not in favour of increasing regulations, nor were the majority of managers, but they did agree with the managers on an imperative to make guidelines available. It was suggested that the guidelines should be free, up to date, evidence-based and easily accessible from a peak body such as the Alzheimer’s Association. Thus the provision of guidelines was seen as an important part of the
process of educating all key stakeholders, including local government officials and families as well as the architects and the managers of aged care facilities, at the same time there was a recognition that simply making guidelines available would not be sufficient to change practice. Suggestions of using the professional development activities associated with continued registration as an architect was identified as one strategy to engage architects with this important issue. Other strategies identified including showcasing of successful designs to highlight the benefits to staff satisfaction, staff turnover and families’ and residents’ quality of life, are worthwhile but reflect a more ad hoc approach to addressing a key capacity deficit in the sector; a deficit which will potentially result in billions of dollars of aged care infrastructure being built which may not be fit for purpose.

**Recommendations**

1. The evidence on the relationship between good design and operating costs should be explored and the relationship made clear to aged care providers and designers to assist them in their decision-making.
2. The heads of architecture and design schools should be consulted on how best to provide undergraduate and practicing architects and designers with education on environmental design for people with dementia.
3. The opportunity to provide professional development courses via the Australian Institute of Architects should be explored.
4. Up-to-date guidelines should be provided through a well-respected agency, such as the Alzheimer’s Association, and they should be free of charge and in an easily accessible format.
5. Researchers and others involved in knowledge translation should take every opportunity afforded by peak body conferences and other events, to inform the key stakeholders, particularly the managers of aged care facilities, of the advantages of evidence-based design.
6. A method for showcasing well-designed facilities should be developed. It should include information on the operational benefits deriving from good design.
7. A consultancy and educational service that will assist with the auditing of existing and planned future environments, leading to a discussion with managers and designers on strategies for improvement, should be established.
8. Particular emphasis should be placed on ensuring that residential aged care managers have timely access to information and advice on environmental design so that they can provide the architect with a clear brief and consistent direction.

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