



Tales, A., Burholt, V., Nash, P., Bichard, J.-A., Clayton-Turner, A., Coulthard, L., & et al. (2017). Dementia-friendly public toilets. *Lancet*, 390(10094), 552-553. [https://doi.org/10.1016/S0140-6736\(17\)31813-5](https://doi.org/10.1016/S0140-6736(17)31813-5)

Peer reviewed version

License (if available):  
CC BY-NC-ND

Link to published version (if available):  
[10.1016/S0140-6736\(17\)31813-5](https://doi.org/10.1016/S0140-6736(17)31813-5)

[Link to publication record in Explore Bristol Research](#)  
PDF-document

This is the author accepted manuscript (AAM). The final published version (version of record) is available online via science direct at <http://www.sciencedirect.com/science/article/pii/S0140673617318135?via%3Dihub#!>. Please refer to any applicable terms of use of the publisher.

## University of Bristol - Explore Bristol Research

### General rights

This document is made available in accordance with publisher policies. Please cite only the published version using the reference above. Full terms of use are available: <http://www.bristol.ac.uk/red/research-policy/pure/user-guides/ebr-terms/>

# *'Toilet Paper'*

## *Dementia-friendly Public Toilets*

Andrea Tales<sup>1\*</sup> (PhD), Vanessa Burholt<sup>2</sup>, Paul Nash<sup>2</sup>, Jo-Anne Bichard<sup>3</sup>, Angela Clayton-Turner<sup>4\*</sup>, Amy Jenkins<sup>1</sup>, Gordon K. Wilcock<sup>5</sup>, Judy Haworth<sup>6</sup>, Elizabeth Coulthard<sup>7</sup> (FRCP, PhD) Hilary Archer<sup>7</sup>, Marcia Vale<sup>4</sup>, Sara Miles<sup>4</sup>, Chris Jones<sup>8</sup>, Nick Johnson<sup>9</sup>, Graham O'Connor<sup>10</sup>, Tony Bayer<sup>11</sup>.

Corresponding Author. Professor Andrea Tales, Department of Psychology, Swansea University, Singleton Park, Swansea SA2 8PP. Tel: 01792 205 678, e mail: A.Tales@Swansea.ac.uk

<sup>1</sup> Dementia Research Group, Department of Psychology, Swansea University, Singleton Park, Swansea SA2 8PP. \*BRACE-Alzheimer's Research. <https://www.alzheimers-brace.org>

<sup>2</sup> Centre for Innovative Ageing, College of Human and Health Sciences, Swansea University, Singleton Park, SA2 8PP.

<sup>3</sup> Helen Hamlyn Centre for Design, Royal College of Art, 4 Hester Road, London, SW11 4AN.

<sup>4</sup> Alzheimer's Society, 43-44 Crutched Friars, London, EC3N 2AE.

<sup>4\*</sup> Alzheimer's Society Volunteer and former carer.

<sup>5</sup> Nuffield Department of Clinical Neurosciences, University of Oxford, John Radcliffe Hospital, Oxford, OX3 9DU.

<sup>6</sup> Department of Care of the Elderly, North Bristol NHS Trust, Southmead Hospital, Bristol, BS10 5NB.

<sup>7</sup> ReMemBr Group, School of Clinical Sciences, University of Bristol, Southmead, Bristol, BS10 5NB.

<sup>8</sup> Gwalia Care and Support, POBL Group, 7-13 The Kingsway, Swansea, SA1 5JN.

<sup>9</sup> ABUHB-Dementia Care Advisory Team Lead, Angelton Clinic Glanrhyd Hospital, Bridgend.

<sup>10</sup> Community Mental Health and Memory Assessment Team, Glangwili Hospital, Carmarthen, SA31 2AF.

<sup>11</sup> Division of Population Medicine, School of Medicine, Cardiff University, CF14 4XN.

<sup>12</sup>BRACE Charity Office, The Brain Centre, Southmead Hospital, Bristol, BS10 5NB.

Many older adults avoid travel and social interaction because of the lack of public toilets or their inaccessibility. Furthermore, where public toilets are provided, poor design and signage can preclude independent use particularly for people living with dementia.

Urinary and faecal incontinence are common problems in older people and especially those with dementia, particularly at the moderate to severe stages. Incontinence may be attributable to cognitive impairment, behavioural change, lack of motivation, another medical condition, medication or loss of mobility and manual dexterity, but it can also be related to difficulties with the accessibility of toilets within the built environment. Paradoxically, this enhanced need for toilets in people living with dementia is accompanied by neurological and functional changes that may render their use onerous, unsatisfactory and anxiety -provoking. In addition to abnormalities in memory and orientation, research indicates that dementing illnesses can have a detrimental effect upon many aspects of visual information processing including visual acuity, colour vision, eye movements, depth perception, useful field of view, contrast sensitivity function, distractibility, reading, perception, visuospatial function and orientation. Naming and identifying objects and various aspects of attention are also commonly impaired<sup>1-4</sup>. These factors can preclude the successful use of toileting facilities when they are available.

In general, there is a chasm between current public toilet provision and toilet design appropriate for individuals living with dementia. In response to both research and anecdotal evidence, many guidelines are available to inform and improve the design and independent usability of toilet facilities for people living with dementia<sup>5-11</sup>. Examples include the use of familiar or automatic flush systems, non-reflective surfaces, good lighting, contrast between doors and surrounds and between the toilet and the toilet seat, sinks that don't resemble urinals, well-labeled taps and soap dispensers and the careful placing of mirrors.

However, as highlighted by a significant amount of anecdotal evidence, the lack of simple, clear 'way out' signs negates any positive influence of a well-designed toilet facility. Such an omission can result in distress, anxiety and embarrassment and reluctance to use the toilet in the future. Common examples submitted to the authors, include instances of people having to enter opposite sex toilet facilities to guide their partners out, going through the wrong door and into the kitchens of restaurants or ending up

outside the building rather than back on the shop floor. A fire exit sign showing someone running with a directional arrow is also easily misunderstood as an exit sign. This may well result in misdirection, with people ending up outside the building and, in some cases, wandering on to a road. Similarly, doors that are both a fire exit and the route back to a public area can cause confusion and may elicit a reluctance to open them, primarily because of the fear of setting off a fire alarm.

People living with dementia, with arguably some of the greatest need to quickly find, use and safely exit a public toilet, experience some of the greatest difficulties in doing so. Sometimes there are distressing consequences which have a detrimental impact upon confidence, levels of anxiety and quality of life. These in turn negatively impact on the ability or desirability of maintaining activities such as shopping, trips out, and social gatherings and so lead to social isolation, loneliness and the loss of independence. These losses will also be experienced by the caregivers of people living with dementia who can no longer leave their loved ones alone at home.

Effective intervention, such as putting up clear exit signs, should be simple and will benefit everyone, not just those with dementia. The key is for the public and professionals to raise awareness and to pressure retail and public bodies to take prompt corrective action.

## **REFERENCES**

1. Dementia and sight loss. RNIB Scotland, 2012, [www.rnib.org.uk](http://www.rnib.org.uk)
2. Chang LYL, Lowe J, Ardiles A, Lim J, Grey AC, Robertson K, Danesh-Meyer H, Palacios AG, Acosta ML. Alzheimer's disease in the human eye. Clinical tests that identify ocular and visual information processing deficit as biomarkers. *Alzheimers Dement* 2014; **10**: 251-61.
3. Alzheimer's Society 2016. Sight, perception and hallucinations in dementia. Fact Sheet 527, London, [Alzheimers.org.uk](http://Alzheimers.org.uk).  
[https://www.alzheimers.org.uk/download/downloads/id/3369/sight\\_perception\\_and\\_hallucinations\\_in\\_dementia.pdf](https://www.alzheimers.org.uk/download/downloads/id/3369/sight_perception_and_hallucinations_in_dementia.pdf)

4. Armstrong R, Kergoat H. Oculo-visual changes and clinical considerations affecting older patients with dementia. *Ophthalmic and Physiol Opt* 2015; **35**: 352-76.
5. Sight loss, dementia and meaningful activity: A scoping study. Report for Thomas Pocklington Trust. Alison Dawson, Catherine Pemble and Diane Theakstone. University of Stirling, 2016. [www.pocklington-trust.org.uk](http://www.pocklington-trust.org.uk). See also Good practice in design for dementia and sight loss. <http://dementia.stir.ac.uk/design/good-practice-design-dementia-and-sight-loss>
6. Hanson J, Bichard J, Greed C. The Accessible Toilet Design Resource. London, University College London (2007). <http://discovery.ucl.ac.uk/4847/>
7. British Standards Institute BS8300: 2009. Design of buildings and their approaches to meet the needs of disabled people- a code of practice. London, BSI. <http://www.acornironmongery.com/dda/Guide%20to%20standards%20BS%2083000.pdf>
8. Afacan Y, Gruel MO. Public toilets: an exploratory study on the demands, needs, and expectations in Turkey. *Environ Plann B Plann Des* 2015; **42**: 242-62.
9. Bichard J-A, Knight G. Improving public services through open data: public toilets. *Municipal Engineer* 2012; **165**: 157-65.
10. Hägglund D. A systematic literature review of incontinence care for persons with dementia: the research evidence. *J Clin Nurs* 2010; **19**: 303-12.
11. Siu KWM. Better design quality of public toilets for visually impaired persons: an all-round concept in design for the promotion of health. *JRSoc Promot Health* 2008; **128**: 313-19.