

**Getting Evidence into Clinical Practice:
Colour Contrast Group (CAT Group)
Date:24.11.21**

Specific Question:

In adults with dementia, is the use of colour contrasted toilet facilities more effective than a uniform colour in maintaining safety, dignity and independence?



Clinical bottom line

Colour contrast is widely used in dementia friendly environments. The literature review by Bowes et al. (2016) found evidence to support the use of colour contrasted toilet facilities for people with dementia. The Kings Fund and Worcester University have completed further project work and subsequently developed tools informed by research evidence, best practice and consultations with users, carers and professionals. Tools have been developed for general hospital environments and care homes. (The King's Fund and University of Worcester, UK 2020).

The studies, included in the review relating to colour contrast were mainly of low quality, but consistent findings did emerge. These suggested that contrasting colour can support independence, improve functional ability, and short term-memory for people living with dementia and may be helpful in a range of settings, including toilets. There was an emphasis on care homes, however the findings are transferable to other settings.

There is potential for local action, it may be useful to audit different areas across the Trust to gain more information.

Why is this important?

Following attendance at a conference where contrasting colours were suggested for environments for patients with dementia, a member of staff explored this further.

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Anecdotally several inpatient and outpatient hospital and care home settings have reported patients having falls or incontinence episodes in toilet facilities where the decoration and equipment are one uniform colour. Those rooms decorated with contrasting coloured accessories such as toilet seats, toilet systems and flooring appeared to have less incidents.

Changes to room decoration and facilities could potentially prevent or reduce the numbers of these incidents for improved safety, patient dignity and independence.

Search timeframe (e.g. 2011-2021)

Search completed on 3rd August 2021 timeframe all available years to August 2021.

Inclusion Criteria

	Description	Search terms (In the final document this should be a combination of your clinical and librarian search terms)
Population and Setting	People living with Dementia	DEMENTIA/"ALZHEIMER'S DISEASE" "TOILET FACILITIES" (rest room). (water closet) (power room) (dementia friendly)
Intervention or Exposure	Bathroom facilities with contrasting colours	"ENVIRONMENT DESIGN" "facility design and construction"/ or "nursing home design and construction"/ "hospital design and construction"/
Comparison, if any	Bathroom facilities with uniform colours	Usual care
Outcomes of interest	Safety, dignity and	Falls, activities of daily living, dignity, independence.

CAT Leads: Analisa Smythe; Tina Hadley-Barrows; Saskia Poller; Pam Collins.
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	independence	
Types of studies	Reports; Quantitative, Qualitative and Mixed Methods Studies; Randomised Controlled Trials (RCTs) & Systematic Reviews (SRs)	Reports developed to inform guidelines for best practice; Quantitative, Qualitative and Mixed Methods Studies; RCTs; SRs.

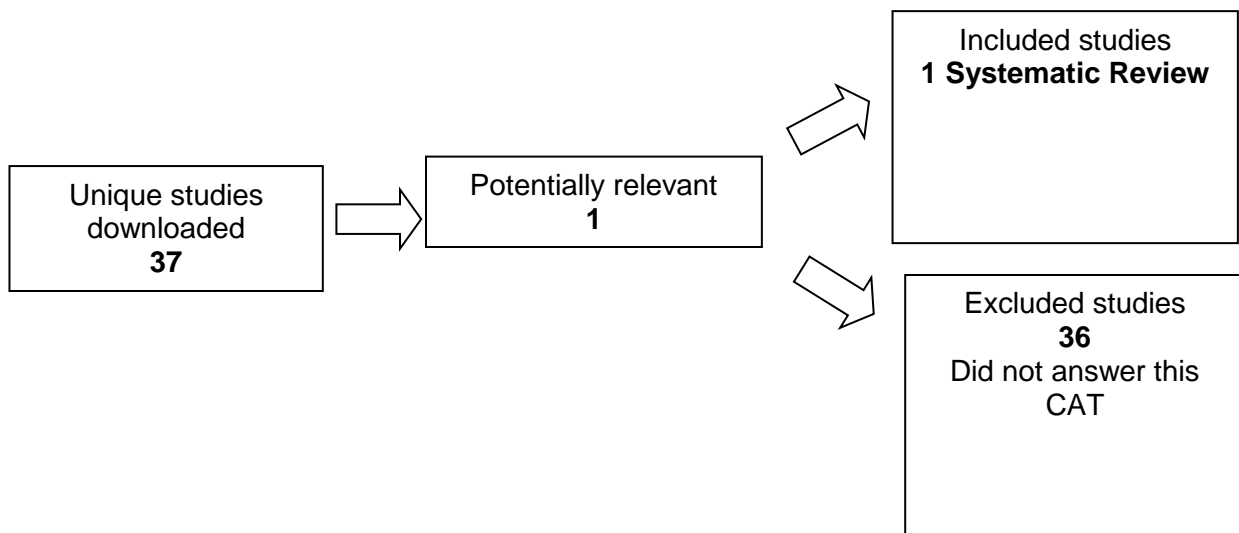
Routine Databases Searched

Systematic Reviews (SRs) & Randomised Controlled Trials (RCTs)

Cinahl, Medline, Embase, MAG Online, PsycInfo, PubMed, Google Scholar, Cochrane, King’s Fund (The Kings Fund work included consultations with users, carers and professionals).

Date of search- 3rd August 2021

Results of the search



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Table 1- Detail of included studies

First Author, year and type of study	Population and setting	Intervention or exposure tested	Study results	Assessment of quality and comments
<p>Bowes et al. (2016) Systematic Review (Papers in the review included a literature review, opinion piece, evaluation, guidelines, and qualitative studies).</p>	<p>The review focused on designing living arrangements for people with dementia and sight loss.</p> <p>The review involved systematic searches conducted in 2012, the search was complemented by consultation with experts in the field.</p> <p>The review was conducted in the UK. The majority of studies focused on nursing and residential homes</p>	<p>Residential environments for people with dementia and sight loss.</p>	<p>Of the 33 papers included in the review 6 focused on colour contrast.</p> <p>The authors acknowledged that limited evidence was available. The studies included in the review were appraised as medium to low quality.</p> <p>The review suggested that contrast rather than colour was of particular significance for people with dementia.</p>	<p>The review was unbiased and used appropriate search methods.</p> <p>The quality was assessed and synthesised in narrative way.</p> <p>The method for the conduct of the review lacked clarity.</p> <p>Key information was missing E.g., date range for the search, strategy for the inclusion of</p>

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	or sheltered accommodation.			papers in the review, number of authors involved in the screening process.
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Summary

The review by Bowes et al. (2016) was medium quality and the best available evidence to answer this question. Of the 33 papers included in the review, six focused on colour contrast. The authors acknowledged that the evidence was low quality and limited. A narrative qualitative analysis of the findings was undertaken. The review found consistent evidence to suggest that using colour contrast can promote independence, improve functional ability and short term-memory for people living with dementia. The review also suggested contrasting colour may present difficulties. There is the potential for using contrast to discourage people with dementia from entering certain areas, therefore the intervention should always be used ethically and not as a means of restraint.

This systematic review informed work undertaken by the Kings Fund (2014) and was updated for the development of guidelines to support dementia friendly environments (The King's Fund and University of Worcester 2020).

Implications for Practice/research

There is evidence to support the use of colour contrasted toilet facilities for people with dementia and colour contrast is widely used in dementia friendly environments. A range of dementia friendly assessment tools for use in care settings have been developed to help health and care organisations provide a more supportive environment for people with dementia (The King's Fund and University of Worcester, UK 2020).

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What would you tweet? (140 characters)

Evidence supports the use of colour contrasted toilet facilities for people with dementia and is widely used in dementia friendly environments. Assessment tools are available to help health and care organisations provide more supportive environments.

<https://www.kingsfund.org.uk/sites/default/files/EHE-dementia-assessment-tool.pdf>.

References

Bowes, A., Dawson, A. Greasley-Adams, C et al. (2016) Design of residential environments for people with dementia and sight loss: A structured literature review. British Journal of Visual Impairment, 34, 3, 225-237, 225-237. University of Stirling.

The King's Fund and University of Worcester (2020) Environmental assessment tools. Available at: <https://www.worcester.ac.uk/about/academic-schools/school-of-allied-health-and-community/allied-health-research/association-for-dementia-studies/ads-consultancy/the-kings-fund-environmental-assessment-tools/home.aspx>. (Accessed 18th May 2022).

The Kings Fund (2014) Is your ward dementia friendly? EHE Environmental. Available from <https://www.kingsfund.org.uk/sites/default/files/EHE-dementia-assessment-tool.pdf>. (Accessed 18th May 2022).