

Involving all staff in strategies to improve hydration among residents enabled a care home to reduce health problems and improve the general atmosphere in the home

HYDRATION: PART 2 OF 2

# Reducing dehydration in residents of care homes

## In this article...

- › Challenges associated with providing hydration in care homes
- › How one care home improved hydration care for its residents
- › How to involve all staff in supporting residents to drink

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**Abstract** Hooper L et al (2015) Reducing dehydration in residents of care homes. *Nursing Times*; 111: 34/35, 16-19  
Dehydration can have serious consequences for older people and is a particular problem for residents of nursing and care homes. This article, the second in a two-part series, describes how a specialist care home for people with dementia in Great Yarmouth introduced high-quality hydration care to frail residents. By involving all staff and ensuring residents take a litre of fluid by the end of a relaxed and extended breakfast, staff have reduced anxiety and aggression and created a calmer and more sociable atmosphere. This has benefitted residents, visitors and staff, and is reflected in low levels of unplanned hospital admissions and paramedic call-outs.

Dehydration in older people increases their risk of several health problems including urinary tract infections, constipation, heat stress and pressure ulcers. It can lead to disability, unplanned hospital admissions and death (Hooper et al, 2014). For those with dementia, dehydration can also lead to more challenging behaviour requiring increased use of anti-psychotic medication or admission to a specialist mental health unit.

Despite its potentially serious consequences, dehydration is common among residents in nursing and care homes. The Dehydration Recognition In our Elders (DRIE) study found that, across 56 residential, nursing and dementia homes in Norfolk and Suffolk, about one in five residents were dehydrated (Siervo et al, 2014). DRIE took place over two years and involved 200 care home residents ([dries-tudy.appspot.com](http://dries-tudy.appspot.com)). It aimed to improve health and wellbeing of older people living in residential care by:

- » Assessing methods to identify early dehydration, which can be used in residential care, so prevention and treatment strategies can be rapidly mobilised;
- » Clarifying associations between dehydration and health, functional status and quality of life in frail older adults.

A second study (DRIE 2) is currently assessing a three-stage test to identify dehydration. The study has enlisted a new cohort of 200 care home residents, and we have undertaken two systematic reviews: one on signs of dehydration in older people (Hooper, 2015; Hooper and Bunn, 2015), and one on helping older people drink well (Bunn et al, 2014). This article describes the thoughtful and respectful approach to promotion of hydration in people with severe dementia taken by one care home participating in our study.

## Literature review

The systematic review assessed existing research on how to help older people living in residential care to drink well and prevent dehydration (Bunn et al, 2014). We included 19 intervention and four

## 5 key points

- 1 Improving hydration in care home residents reduces anxiety and improves quality of life for both residents and staff
- 2 Residents should be encouraged to drink up to a litre of fluid between waking and the end of breakfast
- 3 Drinking should be seen as a social activity
- 4 All staff should be involved in ensuring residents are hydrated
- 5 Residents should be asked every day what they want to drink and given plenty of choices



## BOX 1. STRATEGIES TO IMPROVE HYDRATION

### Encourage high fluid intake early in the day

Alexandra House staff aim to ensure every resident takes 700-800ml of fluid by the end of breakfast, in the form of drinks, with a further 200-300ml added to cereals or porridge; they do this by encouraging drinking before and after the morning bath, and during breakfast

### Be generous in provision of drinks

Cold water is provided in the lounges and a tray of tea for visitors so drinking becomes a sociable experience

### Extra fluid provision in the summer

Each resident has a heat wave risk assessment and personal fluid care plan (Fig 1)

### Early recognition of urinary tract infections (UTIs)

Staff are aware of the signs of UTI and the nurse manager works closely with residents' GPs to ensure effective treatment begins early

### Establish a good drinking routine

Residents are offered one or two drinks during the morning, at lunch, at afternoon tea, at the evening meal and during the evening. Although they tend to drink less during the evening, hydration is assured by the morning fluid boost

### Monitoring bowel movements

The Bristol Stool Chart is used and a detailed record is kept so constipation is dealt with before it affects eating and drinking

### Ensuring a comfortable upright sitting position

This is helpful when eating and drinking because it prevents regurgitation and inhalation. All residents are supported into a good sitting position and referrals are made to occupational therapists for advice

### Monitoring diuretics

Fluid intake is discussed at handover, and the GP is alerted when residents who are

prescribed diuretics are not drinking well. Diuretics can be stopped temporarily to prevent excessive fluid loss

### Identifying personal tastes on admission

Staff ensure they are familiar with all residents' favourite drinks and exactly how they like them

### Awareness of drink allergies and interactions with medication

Staff need to know about medications that interact with food and drink such as simvastatin and grapefruit juice

### Residents with colds are identified

Colds and coughing can affect fluid intake, and thickened fluids may help until symptoms subside

### Checking continence pads

Staff regularly check that continence pads are heavy in the morning, which indicates that residents are drinking well. If pads are light then all staff are alerted that fluid intake may be an issue

observational studies from seven countries, which investigated factors related to drinking and hydration at resident, institutional or policy level. Overall, studies were at a high risk of bias because of poor assessment of fluid intake and hydration status; this means we should regard the research evidence as informative, but not definitive.

Several studies that appeared to succeed in increasing fluid intake developed and tested multi-component strategies. These included greater choice and availability of drinks, increased staff awareness, and increased staff assistance with drinking and toileting.

Implementation of the US system of assessing, recording, responding to and submitting information on hydration to a central regulator (the Resident Assessment

Instrument) reduced dehydration prevalence from 3% to 1%. One study of just nine men with severe dementia compared high-contrast red cups with white cups, and found that drinking increased with the more obvious red cups.

Interventions that were not clearly effective included modifying the dining environment, giving advice to residents on drinking, decanting supplemental drinks into a beaker (compared with putting a straw in the original packaging) and using commercially pre-thickened drinks (compared with thickening drinks locally). The evidence for these interventions is limited but they may work in some circumstances.

Levels of staffing and funding models for care homes (for-profit compared with not-for-profit) were not clearly associated with hydration status.

Better research is needed to understand how we can help frail older people living in residential care to drink well, but the existing research does offer some ideas of how to proceed.

### Dementia care home

Alexandra House, in Great Yarmouth, is a specialist dementia care home taking part in the DRIE and DRIE2 studies. The home, which has 20 residents, aims to provide security and routine for people with severe dementia, reintroducing the rituals of normal life. Residents get up in the morning, have a bath, come downstairs for breakfast, use their own chairs in the lounge, eat meals in the dining room, have tea and coffee in the lounges, and go to bed in the evening. There are three lounges, each with its own fireplace and distinct ambience in terms of colours, sound and television use. The staff ratio is one to three residents, and care and nursing staff spend their days with the residents – they do not carry out domestic tasks.

Staff at the home have worked hard to reduce the risk of dehydration among residents. They have taken the existing evidence and their knowledge about residents and developed unique strategies for supporting hydration. The multi-component approach includes staff training. It also

## FIG 1. ALEXANDRA HOUSE HEAT WAVE RISK FORM

<b>Resident's name</b>	<b>Date of birth</b>
<b>Diagnosis</b>	<b>Other conditions (risk factors)</b> such as respiratory, skin, obesity
<b>Medications</b>	
<b>Risks</b>	
<b>Actions</b>	
<ul style="list-style-type: none"> <li>● Increase fluids</li> <li>● Ensure resident is wearing appropriate clothing</li> <li>● Keep rooms cool with fans and blocking of direct sunlight</li> <li>● Record room temperatures with an aim to keep below 26 degrees</li> </ul>	

## Nursing Practice Innovation

### BOX 2. DOMESTIC ASSISTANTS' ADVICE

Julie Watters and Beverley Haynes are domestic assistants. Ms Watters makes breakfast and supper, and helps residents to eat and drink their breakfasts, while Ms Haynes sorts out the washing up, and collects used mugs and cups from the dining room and lounges. Their strategies to help residents drink well include:

#### Do not make assumptions

Always ask residents individually what they would like to drink – although they had coffee yesterday, they may prefer water or tea this morning. Some residents can express a preference but, for those who cannot, staff should keep track of the drinks they appear to prefer

#### Monitor intake

Staff should monitor when residents have not finished their drinks and offer another drink and inform other staff

#### Select suitable drink containers

The suitability of cups and saucers, mugs, two-handed mugs, straws and spouts may vary from day to day, depending on a resident's condition. Staff should support drinking when spouted cups are used, allowing a small amount to be taken before

removing the cup for a short time, to avoid choking. Care staff should find the container that is appreciated by the resident and provides as much independence as possible. Nurses at Alexandra House work with residents one to one to try out new aids in a private room; this is out of view of other residents to minimise embarrassment if they spill fluids

#### Maintain social groups

Residents eat and drink better when they are with friends and sitting in small groups

#### Use favourite cups or mugs

Residents' favourite mugs or cups may remind them of an earlier phase of their life or may simply be comforting. For example, one Alexandra House resident always asks for a green drink (orange squash in a green beaker)

#### Use social cues

People with dementia can lose the ability to recognise drinks or knowledge of what to do with a drink. They are more likely to remember to drink when others are drinking around them and when using a familiar cup. High-contrast cups and mugs may also help

good at promoting hydration, she felt it could improve.

Good hydration of people with severe dementia can be difficult as most no longer experience the thirst sensation, remember that they need to drink, or recognise the purpose of a cup of drink. Alexandra House uses a variety of home-wide and individualised strategies to ensure adequate hydration (Box 1, p17).

A key strategy is ensuring all residents drink well in the morning when they are relaxed and keen to drink. They are encouraged to drink at least a litre of fluid by the end of breakfast (which takes place from 7.00 to 10.30am). These fluids can include water with medication, tea, coffee, fruit juice, porridge, supplements and high-protein milk with cereals. Staff make this a pro-active time, as residents are awake and more alert. It is also a sociable time, where staff and residents interact, and staff undertake talking therapy. A nurse and two other members of staff (usually a carer and a member of domestic staff) work in the dining room every morning to support nutrition and hydration.

The whole staff team work with family members and discuss residents' likes and dislikes, and ensure their preferences are available. It is important that all staff, including domestic assistants, are involved in fluid care planning. Box 2 gives examples of interventions made by domestic assistants at the home, while Box 3 gives advice from carers.

Keeping staff hydrated is also considered important, and jugs of water and hot and cold drinks are available for staff at any time.

#### Outcomes

The care home has achieved several benefits for residents since it introduced the hydration strategy. Staff say residents are much calmer, and that verbally and physically challenging behaviours have been reduced. As a result, staff can spend time interacting with residents rather than dealing with stress and calming them down. Medications to modify behaviour have been reduced and are used only occasionally, and staff feel that improved hydration has helped promote continence.

Hydrated residents have better appetites because they are more alert and able to enjoy the experience of food and drink. This is not only good for nutrition but supports social interaction as it is a way of engaging residents in reminiscence – for example, talking about the local chip shop they used before admission.

Anecdotally, many adults in the general



Residents are provided with a range of drinks to choose from to increase fluid intake

harnesses their enthusiasm and ideas on preventing dehydration and how their residents can best be supported to drink well, while promoting independence and quality of life. As a team, the staff work with each resident individually to find ways to support them to drink well. The proprietor, Pru Garvan, said: "Improving the hydration of our residents has made a big difference to the whole home. It is

much calmer now, and making sure our residents are well hydrated has noticeably reduced the level of agitation."

#### Key strategies

Alexandra House first took part in the DRIE study in 2012. The nursing manager, Suzan Whitelock, says involvement in the study increased her awareness of hydration. While the home was already

### BOX 3. CAREER ROLES

Staci Dolan is a trainee carer, Denise Nobbs and Elizabeth Little are experienced carers at Alexandra House. They spend their days with the residents, and offer the following tips to improve hydration, based on their experiences:

#### Keep trying

Offering different drinks, different support (such as a straw or two-handled mug) or a different setting may encourage residents to drink. For example, some do not drink their tea in the dining room after lunch, but are happy to do so once back in the lounge

#### Discuss drinking

Although Alexandra House residents have severe dementia, staff regularly discuss drinking with them, explaining how important it is to their health

#### Think about alternatives

Soup, jelly, ice cream, custard and yogurt are available for residents who may not feel like drinking. These contribute to their fluid intake

#### Understand motivation to drink

One Alexandra House resident stops drinking if his leg catheter begins to fill up, as he is worried it will burst. Emptying his catheter frequently helps to encourage him to drink

### BOX 4. RESOURCES TO HELP MAINTAIN HYDRATION

**Hydration best-practice toolkits:** two useful resources on hydration, one focused on care homes ([Bit.ly/WaterUkCareHomes](http://Bit.ly/WaterUkCareHomes)), the other particularly relevant to hospital settings ([Bit.ly/NutritionNow](http://Bit.ly/NutritionNow))

**Eating Well: Supporting Older People and Older People With Dementia – A practical guide:** a superb resource on helping older people to eat well that also mentions drinking ([Bit.ly/OlderPeopleEatingWell](http://Bit.ly/OlderPeopleEatingWell))

**Nutrition and Hydration Week:** annual global campaign to increase awareness of nutrition and hydration as important aspects of high-quality care in health and social care settings (next will be in March 2016). [nutritionandhydrationweek.co.uk](http://nutritionandhydrationweek.co.uk)

**Drinks Diary:** validated tool to track how much older people drink in a day, available for download (Jimoh et al, 2015) [Bit.ly/DrinksDiary](http://Bit.ly/DrinksDiary)

**Systematic review:** discusses ways to support care home residents in eating and drinking well [Bit.ly/IncreasedFluidIntake](http://Bit.ly/IncreasedFluidIntake)

**Further resources:** posters, quizzes, and tea parties are available on the DRIE study website [driestudy.appspot.com/links.html](http://driestudy.appspot.com/links.html)



Hydrated residents have better appetites because they are more alert

population report that adequate hydration helps to ensure good sleep, while thirst may cause restlessness, disrupted sleep patterns and bad dreams. Poor sleep at night encourages sleep during the day, which can cause residents to miss out on vital fluids. When residents are restless at night they are given fluids where appropriate to help settle them back to sleep.

Alexandra House has had no unplanned hospital admissions since early 2012, when the hydration developments began, and only one or two paramedic call-outs per year during 2012, 2013 and 2014 (four in total). The exact numbers were not recorded before 2012 although staff feel that there has been an improvement.

### Conclusion

Improving the hydration of care home residents, particularly those with dementia, can lead to a calmer and more sociable atmosphere and reduce health problems in residents. This requires the

involvement and enthusiasm of all staff, but benefits residents, staff and visitors. Box 4 includes resources to help address the problem of dehydration.

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### For more on this topic go online...

- Recognising and preventing dehydration among patients
- [Bit.ly/NTPreventDehydration](http://Bit.ly/NTPreventDehydration)
- Detecting dehydration in older people: useful tests
- [Bit.ly/DehydrationPart1](http://Bit.ly/DehydrationPart1)

