Research letters


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Exploring reasons for variation in urinary catheterisation prevalence in care homes: a qualitative study

SIR—About half of long-term care home residents have urinary incontinence [1, 2]. Among elderly care home residents, urinary catheters are independently associated with increased mortality and morbidity [3, 4]. Urinary catheter care bundles are now used by acute and community trusts to focus on catheter care [5, 6]. English care homes with a high prevalence of urinary catheters among their residents did not vary significantly from lower-prevalence homes in home size, residents’ medical needs, staffing, staff knowledge or reported catheter care practices [2, 7]. Care homes that have a complete care culture that is focused on residents individual needs rather than those that are task-centred or cosmetic (primary emphasis on business needs) may have fewer catheterised residents [8]. In this study, we used qualitative research methods [9] to explore whether different approaches to toileting and catheter care, and a home’s culture of care (care delivery, attitudes and communication) are responsible for the variation in the prevalence of catheterisation.

Methods

Participants

We purposively selected 14 registered large care homes with either higher (>9%) or lower (<6%) catheterisation prevalence derived from catheterisation data relating to 2003 [2, 9]. We approached homes, by letter then telephone, through 2005 and 2006. (See Appendix 1 and 2 in the supplementary data at Age and Ageing online.)

The 14 private and voluntary owned homes provided nursing and residential care services; four also offered specific dementia care (See Appendix 2 in the supplementary data at Age and Ageing online). The number of resident places ranged from 40 to 70 and the catheterisation prevalence ranged from 0 to 18%. Twelve nurse managers, 10 nursing grades and 21 care assistant grades were interviewed (see Appendix 2 in the supplementary data at Age and Ageing online).

Ethics

The study received approval from the South West Multi-centre Research Ethics Committee (MREC/02/6/77, July 2004). Managers and three nurses and/or carers in each home, gave written informed consent to participate and were offered a £10 voucher.

Interviews

Semi-structured interviews were developed by the study team, with the community and hospital continence team and a microbiologist. (See Appendix 3 in the supplementary data at Age and Ageing online.) The open questions aimed to explore in-depth, asking for examples, how a decision to insert a catheter was reached and how catheterisation was reviewed. They explored the home’s care culture, attitudes to catheterisation, communication and staffing.

Data analysis

Interviews were audio-recorded, and transcribed verbatim (JB and RHJ). The transcribed data were analysed independently by three researchers (CM, JB, MW). We used a ‘Framework’ analytical approach [10], to develop a coding index around ideas and theories behind high and low prevalence of catheterisation (see Appendix 4 in the supplementary data at Age and Ageing online) [10]. Concepts and overarching themes were derived and developed from the interpretive analysis.
Results

Urinary catheters were inherited from hospitals

Staff from all care homes stated that the decision to catheterise a resident was usually made when residents were hospitalised and they rarely catheterised a resident themselves. They reported that the hospitals’ greater readiness to catheterise patients may be due to insufficient hospital staff to facilitate adequate toileting (see Box 1, Appendix 5 in the supplementary data at Age and Ageing online).

Proactive approach

Staff in all homes recognised that catheterisation of a resident was a method of last resort, but homes with lower prevalence of catheterisation took a more proactive approach to removing inherited catheters, toileting, managing continence, mobility and to maintaining residents’ dignity and independence. Staff in low catheterisation homes would often encourage the resident to return to regular toileting and/or the use of continence aids. In contrast, staff in homes with higher prevalence of catheterisation reported that they usually left an inherited catheter in situ, unless it became blocked or the resident pulled it out and they always complied with the wishes of residents who wanted to keep a catheter.

Staff in homes with lower prevalence of catheterisation considered toileting to be a priority among their care duties and managed incontinence with two- to three-hourly toileting and the diligent use of continence pads. They demonstrated a person-centred approach and said structured toileting and washing routines, although more work-intensive for staff, were better for the residents’ comfort and long-term mobility; and they always encouraged reluctant residents to use the toilet.

In contrast, homes with higher prevalence of catheterisation described a less proactive approach to toileting. Staff wanted to deliver the best care for their residents, but most reported they felt impeded by limited staff. Many reported that catheters reduced their workload and were preferable for incontinent immobile residents. They described how staff shortages, less committed agency staff and time pressures prevented them from toileting residents or changing their continence pads often enough. These staff frequently mentioned residents sitting for long periods on wet continence pads (Table 1 and Box 1).

Staff’s attitude to catheters

A home manager’s attitude to catheters was usually reiterated by other staff. Staff in the higher catheter-prevalent homes viewed catheters as preserving dignity, and prevented frequently wet pads, clothing, bedding and urine smells. In contrast, staff in the lower catheter-prevalent homes considered having a long-term, indwelling urinary catheter undermined a person’s dignity. They described catheters as invasive, uncomfortable or restrictive of movement and reduced a resident’s independence. One manager described training she had received covering the person-centred care approach (Box 1).

Staffing and communication

Many staff reported that residents in care homes had become more dependent in recent years, and several care homes complained that, for funding reasons, residents were inappropriately classified to receive residential care, rather than nursing care. Whereas several staff from homes with higher prevalence of catheterisation reported that the number of catheters could be reduced if there were more staff to undertake toileting, homes with low prevalence of catheterisation reported they had adequate staffing.

Across all homes, staff reported that the continence nurses, residents and their family, and district nurses in residential care units, were all involved in continence care decisions. Some homes complained that they, or residents, had to purchase incontinence pads as continence nurses did not have sufficient resources.

<table>
<thead>
<tr>
<th>Key concepts of proactive approach to care</th>
<th>Typical approach of a more proactive low catheter-prevalent home</th>
<th>Typical approach of a less proactive high catheter-prevalent home</th>
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<tr>
<td>Approach to inherited catheters</td>
<td>Proactively remove inherited catheters, where clinically acceptable, and return residents to toileting or continence aids. Staff highly reluctant to accept catheters as the best option.</td>
<td>More likely to continue with the catheter unless it causes a problem such as blocking, infection, encrustation or falls out.</td>
</tr>
<tr>
<td>Respecting residents’/clients’ choice</td>
<td>Proactively encourage residents to try without a catheter. Staff motivated by a vested interest in residents’ long-term well-being.</td>
<td>Do not actively encourage residents who want to be catheterised to a trial without one. Staff not so aware of long-term consequences for the resident.</td>
</tr>
<tr>
<td>Approach to toileting and continence management</td>
<td>Proactively promote regular toileting regimes. Demonstrate person-centred care: knowing the resident’s needs. Demonstrate effective routines for moving residents and changing continence pads regularly to prevent pressure sores.</td>
<td>Toileting routines less tightly adhered to due to time pressures on staff. Residents often wait longer than necessary for continence pads to be changed and often sit in wet pads.</td>
</tr>
<tr>
<td>Approach to resident immobility</td>
<td>Proactively promote and encourage residents’ mobility.</td>
<td>Residents who spend most of their time in bed are more likely to have a urinary catheter.</td>
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</tbody>
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Table 1. Summary of proactive themes found in higher and lower catheterisation-prevalent homes
## Research letters

### Box 1. Quotes from interviews

<table>
<thead>
<tr>
<th>Quote</th>
<th>Source</th>
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<tr>
<td>Urinary catheters were inherited from hospital: “The majority of people we send to hospital come back with a catheter…”</td>
<td>B Low</td>
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<tr>
<td>Low homes proactively try to remove catheters: “She had a stroke and she was really poorly and she’d gone into hospital and they catheterised her…”</td>
<td>Nurse C Low</td>
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<td>Low homes discuss advantages of no catheter with residents who want to keep them: “I think they’re frightened because they’ve got this tube in, they think I’m not going to be wet, and I don’t have to worry the nurse…”</td>
<td>Nurse D High</td>
</tr>
<tr>
<td>High homes remove catheters if blocked or fall out, but not proactive: “The one that came from the hospital now, she’s a lot better, and if the catheter happens to drop then we will wait and see if she can be fine without the catheter.”</td>
<td>Nurse F High</td>
</tr>
<tr>
<td>High homes go along with residents who wish to keep a catheter: “Some of them say I want mine left in and that’s their choice and it’s mainly because they’re lazy and they don’t want the palaver…”</td>
<td>Nurse G High</td>
</tr>
<tr>
<td>Proactive approach to toileting and immobile residents in low homes: “There’s 12 ‘Activities of Daily Living’… a lot of those are met just by taking somebody to the toilet rather than putting a catheter in. Because…”</td>
<td>Nurse H Low</td>
</tr>
<tr>
<td>Less proactive approach to toileting in high homes: “Some residents with a catheter can empty the bags themselves…”</td>
<td>Nurse I High</td>
</tr>
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<td>Management of immobile residents in high homes: “She’s hasn’t got any mobility at all and a little bit of dementia so she just sits and shouts ‘help’ all day and basically I think that’s why she had a catheter because she had to be hoisted to be moved and everything else. So I think that was just to be so that she would be more comfortable.”</td>
<td>Nurse J High</td>
</tr>
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<td>Senior staff’s attitude to catheters: “She’s in such a state with incontinence and she’s been through a continence advisor, GP’s spoken to them and really say ‘look that’s the best thing for you [is a catheter] because of your dignity.”</td>
<td>Nurse K Low.</td>
</tr>
<tr>
<td>Low homes reported catheters reduce independence: “When I first started, there was so many with catheters, but people are learning, it’s not a thing that should be regularly used; to me it’s not natural…”</td>
<td>Nurse L Low</td>
</tr>
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<td>Inappropriate classification of residents: “I am trying to get a few more made up from high dependency to nursing…”</td>
<td>Deputy Nursing Manager: S Low</td>
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<td>Staffing problem not reported by low homes: “We’ve just got above the staffing notice, so I think that plays an important part really if you’ve got staff to use to go around checking people, toileting people, you don’t have to resort to other measures.”</td>
<td>Manager: I Low</td>
</tr>
</tbody>
</table>
The inappropriate grading of residents has also been reported in audit, variations in case-mix should be taken into account. In any catheterisation may be a good marker for quality of care, independence. Quality of life through maintaining resident mobility and orientation towards enabling residents to attain their optimal description by Davies [8], in which care is person-centred and in our study is consistent with the ‘complete communities’ of the care homes with lower prevalence of catheterisation. Although we excluded smaller homes, our previous study in the same locality [2] demonstrated that smaller homes did not differ from larger homes in terms of resident case-mix and prevalence of catheterisation.

Other work in this area
Our previous care home questionnaire study was not able to identify the differences in proactive care that we have now found using qualitative methods [2, 7]. A European questionnaire survey [11] found that central or southern European countries had a different approach to caring for elderly people in their own homes and accepted the use of urinary catheters more readily than northern countries. As in our study, differences in prevalence of catheterisation could not just be explained by medical conditions [11].

Our findings show similarities to the findings of other recent qualitative work in the field [12, 13]. Dingwell and McLaugherty [13] found, in elderly care wards, that many urinary catheters were inserted during an acute illness, but patients were transferred to rehabilitation wards without any documentation for continued use. They also reported that staff preference determined the use of catheters [12]. Catheterisation often outlives the medical indication for its use and many hospital physicians are unaware of their patient’s catheterisation status [14]. The proactive approach of the care homes with lower prevalence of catheterisation in our study is consistent with the ‘complete communities’ described by Davies [8], in which care is person-centred and orientated towards enabling residents to attain their optimal quality of life through maintaining resident mobility and independence.

We agree with Georgiou et al. that the rate of indwelling catheterisation may be a good marker for quality of care, and could be used for performance management [1]. In any audit, variations in case-mix should be taken into account. The inappropriate grading of residents has also been reported by almost half the care staff Ball et al. interviewed [15]. Our previous work did not show any differences in staffing numbers between high and low homes [2, 7]. The shortages reported in staff in high homes in this study may be due to increasing inappropriate grading of residents due to financial constraints.

Implications
Residents should be transferred from hospitals to care homes with a clear documented urinary catheter review plan. Audits will help to determine how many catheterised patients are discharged from hospitals to care homes. Care homes should be encouraged by continence advisors to implement urinary catheter care bundles [5]. A proactive approach to continence care and catheter removal will be needed to encourage homes to preserve residents’ mobility and independence. Residents’ continence needs should be discussed routinely at handovers. Education, including the use of a person-centred approach, will need to be cascaded down from continence advisors to nursing managers and care staff. Inappropriate categorisation of residents to residential care, rather than nursing, needs to be audited, as it may adversely affect residents’ care.

Key points
- The key determinant of urinary catheterisation prevalence in care homes was how proactively did staff remove urinary catheters from residents discharged from hospital to their home.
- A clear documented catheter and continence care plan is needed when patients are discharged from hospitals to care homes.
- Care homes with a lower urinary catheterisation prevalence had a more proactive approach to management of continence, using structured toileting regimes and encouraging residents’ mobility.
- Inappropriate categorisation of residents to residential rather than nursing care in care homes needs to be addressed as it increases the burden on staff, which may be to the detriment of residents’ care in some homes.

Supplementary data
Supplementary data for this article are available at Age and Ageing online.

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Bronchoscopy in octogenarians

SIR—Fiberoptic bronchoscopy (FOB) is an important
diagnostic and therapeutic tool and is considered to be
a safe procedure [1]. Factors that may increase the risk
of FOB include the general condition of the patient, the
specific procedure performed, available facilities, skills and
experience of the medical personnel [1–5]. The reported
frequency of complications associated with FOB varies
between 0.3 and 30% [1–5], however, the definition of
complications varies between studies.

There is a high prevalence of respiratory diseases in
the elderly, and FOB is often indicated in these patients.
Only a few studies evaluating FOB in the elderly have been
reported [6–13]. Most of these studies conclude that elderly
patients tolerate bronchoscopy as well as younger patients
and that FOB is safe and has a high diagnostic yield. However,
these studies include only a small number of patients over
80 years of age.

In the present study, we evaluate the safety, diagnostic and
therapeutic yield of FOB in patients aged 80 years and older,
and compare these with procedures performed in younger
patients.

Methods

Two thousand nine hundred and sixty-nine FOBs were
performed in adult patients at Hadassah Medical Centre
between January 1997 and April 2004. The patients
included both outpatients and inpatients including those
on mechanical ventilation. One hundred and seventy three
FOBs were performed on 150 patients 80 years or older
(octogenarians). This group constituted the study population.
The control group comprised 201 FOBs randomly chosen
from the 2,796 procedures performed on patients aged
19–79 years (the computerised randomisation was arbitrary,
using patient identification numbers). A retrospective
analysis was done in both groups to evaluate the indications;