Oral health policy and access to dentistry in care homes

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Abstract

Aims and objectives: This study had the aim of exploring factors which may facilitate or impede access to dental care and arrangements within the care home to maximise oral health of residents by undertaking a survey of care home managers.

Design: A survey questionnaire was designed and posted to 90% of the care home managers in Wales. The remaining 10% of managers were contacted for face-to-face interviews. The questions covered arrangements to ensure regular dental care, access to routine and emergency dental care, facilities on site for delivering dental care, residents requiring assistance with oral hygiene and related staff training, and whether diets were based upon assumptions that residents have dentures or trouble chewing food.

Results: The questions used in the questionnaire have identified a number of issues of interest to those commissioning and inspecting services. These include, weaknesses in arrangements for ensuring all residents in care homes have suitable assessments on admission, difficulty in accessing both routine and emergency dental care, training issues for staff who are assisting residents with oral hygiene, and assumptions made about the ability of residents to chew food, which is affecting the range of food offered.

Conclusions: This survey has highlighted issues which will be of interest to those commissioning, providing and inspecting care homes and those commissioning dental services in Wales. Needs assessment regarding oral health of care home residents should include care planning, oral health and dental access arrangements in the home.

Key words: Needs, elderly, care home, dental

Introduction

Maintaining the dental health of the older population of the UK will be an increasing challenge. The UK population is at an all time peak and older people now make up a larger proportion of the population. Successive Adult Dental Health Surveys have shown each decennial cohort retaining more teeth than their predecessors (Kelly et al., 2000). We will see a wider diversity of both general and dental health needs among older people including managing heavily restored teeth (National Working Group for Older People, 2005).

The National Diet and Nutrition Survey of older people conducted in 1995 was the first Office for National Statistics survey to examine the dental health of a sub sample of people living in care homes (Steele et al., 1998). The sub-sample was small (275 individuals) which limited detailed comparison of residents with free living older people. The nutritional state of dentate individuals living in care homes was closer to that of edentulous individuals living in the community than to free-living dentate peers. It was suggested this might be due to feeding policy assumptions that people had trouble chewing food (Sheiham et al., 1999). Residents of care homes had fewer teeth than their peers living in the community which may partly reflect a historical pattern of extraction of teeth and denture construction in the home (Steele et al., 1998). Residents had more unmet dental need and older and more poorly fitting dentures. Fiske et al. similarly reported that people living in care homes had more fillings and extractions required than free living peers, even though they had fewer teeth (Fiske et al., 1990).

While there is limited local information on the care needs of residents, the pattern of need described by the National Diet and Nutrition Survey of Older People, for example, more untreated dental disease and older and more poorly fitting dentures, can be extrapolated to the
local care home population. Such findings are the norm according to other surveys reported in the scientific literature (Fitzpatrick, 2000; Simons et al., 2001; Worden et al., 2006) and discussion with community dental officers in Wales confirms this view.

Many older people believe oral problems are part of ageing because they are not aware that the problems could be treated (Smith and Sheiham 1980; Kandleman et al., 1986). It would not be surprising if staff were similarly unaware of benefits of dental treatment for care home residents. Some oral health problems may be better managed conservatively for the frail, older patient. This pattern of need suggests that residents of care homes with teeth or dentures are in need of regular dental care.

Wales still has generally good access to NHS dental care. While there are local services available this does not mean that all unmet need will be addressed, unless there are adequate processes to identify those with need and to bring them into contact with care providers. Simons et al. reported on a survey of residents of residential care homes in 1996/7 and concluded “managers and deputy managers indicated that there was no systematic approach to arranging dental care” (Simons et al., 1999). Surveys have examined assessment processes in care homes finding inconsistent recording of oral health status of residents (Hoad-Roddick, 1992).

Ten years later Worden et al. examined assessment tools used in care homes in the North West region of England and noted that oral health was only infrequently mentioned (Worden et al., 2006). In a further study, Hoad-Roddick and Heath found that where residents’ oral health records were in use, staff awareness of oral health issues was greater (Hoad-Roddick and Heath, 1995).

People living in care homes may or may not be self caring with regards to their oral health but the fact that they are not living independently suggests some level of frailty or dependence. Living in an institution, they are likely to be dependent on others for some or all of their oral self care, arranging routine dental care and emergency dental care. Many homes have high staff turnover which reduces the likelihood of effective management of oral health issues unless there are processes to manage this.

The evidence suggests that despite high levels of dental need, care home residents are less likely to come into contact with dentists than their need would suggest and that arrangements to assist them to do so are patchy. In light of these concerns it was decided to undertake a survey to explore the local arrangements which assist in ensuring those in need come into contact with dental services.

This paper reports on an assessment of factors which may facilitate or impede oral health and access to dental care. The assessment was conducted as a survey of care home managers in Wales undertaken in 2006/7. The survey was undertaken as part of the NHS co-ordinated dental epidemiology programme. This survey has not examined care home residents’ oral health, but rather the context in which oral health is promoted to a greater or lesser degree. Extrapolating findings from other clinical surveys suggested there was significant unmet need for dental care among residents of Welsh care homes. Processes to support access to dental care and oral health promoting activities were targeted by this survey which was intended to inform local care home oral health needs assessment.

The aim of this study was to undertake a survey of care home managers, exploring factors which may facilitate or impede access to dental care and arrangements within the care home to maximise oral health of residents.

Method

This survey focused upon the care home as a unit of interest. A number of questions were developed to explore factors which may assist in improving the oral health of care home residents or their access to dental care.

The questionnaire covered a range of topics illustrated in Table 1. These reflected concerns raised by the National Diet and Nutrition Survey of Older People and the Welsh Healthcare Standards in Fundamentals of Care (Welsh Assembly Government, 2003). This paper summarises the findings of questions on access to dental care, training of staff and assumptions about ability of residents to chew food.

The first six questions were chosen to identify whether systems were in place to ensure new residents were placed into routine dental care, and the seventh to identify whether any arrangements were in place to ensure that existing residents remained in routine dental care. Subsequent questions asked which dental service the home first turns to for emergency and routine dental care respectively and whether there had been difficulty accessing such care since the introduction of a new dental contract on 1 April 2006.

Three further questions focussed on opportunities to provide some dental care within the care homes. These asked about dental chairs or suites, rooms with a chair and a sink, and parking space for a large van (intended to equate to a mobile dental unit).

Questions also asked whether residents routinely received assistance in cleaning teeth or dentures and whether care home staff had received training in these topics. The final two questions asked about the lunch menu that day and whether the feeding policy in the home assumed that residents had no natural teeth. The former was included to encourage an honest answer to the latter and results are only therefore presented for the latter question.

Arrangements and standards for the survey were covered by the survey protocol and a training exercise. A
postal survey questionnaire was the primary vehicle for this survey; however, it was supplemented with a 10% face-to-face sample in order to assess the reliability of the responses obtained by the postal survey. The interview questionnaire was designed for completion by the survey examiners, who had in previous years been involved in NHS co-ordinated dental surveys of children’s teeth in schools. These 17 examiners attended a training and calibration exercise where they received a briefing on the purpose of the various questions, and training in interviewing techniques. All 17 staff conducted the face-to-face interviews, administered the postal survey and entered the data.

All care home managers in Wales were invited to take part in the survey. The target population was drawn from the list held at that time on the Care Standards Inspectorate Wales website. A 10% random sample was drawn in each of the 22 Welsh local health board (LHB) areas for data collection by interview. For this sample, the letter to the care home requested the manager of the home to contact the interviewer in order to arrange an interview to be conducted within the care home. For the remaining 90% of homes, the postal questionnaire was distributed with a covering letter and a stamped addressed return envelope. A local record of the managers who had responded was maintained and was used to enable a second mailshot to non-responders and a follow up telephone call to those who did not respond to the second mailshot.

Fieldworkers entered the data using Dental SurveyPlus 2 and forwarded it to the Welsh Oral Health Information Unit (WOHIU), a dental epidemiological unit within Cardiff University. Personnel at the WOHIU (MM) collated and cleaned the data for analysis. It was subsequently analysed using SPSS (SPSS 12 for Windows; SPSS Inc., Chicago, Illinois) and Excel 2003.

The belief that a written care plan is more likely to be acted upon than a memorised checklist underpins the analyses in this paper. Thus the analysis of this report assumes that ‘yes as part of a written care plan’ is the appropriate response where it is an option in a question.

**Table 1 Survey questions**

| NEW RESIDENTS |
| Are enquiries made to confirm presence of any natural teeth? |
| Are enquiries made to confirm wearing/use of dentures? |
| Are enquiries made to confirm time since last dental check? |
| Are enquiries made to confirm whether the resident has a dentist? |
| Are enquiries made to confirm whether the resident would wish to have a dental check appointment made? |
| Are enquiries made to identify whether the resident has any dental problems? |

| EXISTING RESIDENTS ROUTINE DENTAL ACCESS |
| Is there a mechanism to ensure planned regular dental checks for residents? |

| EMERGENCY DENTAL TREATMENT |
| Are there arrangements to manage dental pain for residents without a regular dentist? |
| Are there arrangements to manage dental pain for residents with a regular dentist? |

| DENTAL CARE FACILITIES |
| What dental facilities can be provided/accommodated on site? |
| Which dental service does the home turn to first for routine dental care? |
| Which dental service does the home turn to first for emergency dental care? |
| Have there been difficulties accessing routine dental care for residents? |
| Have there been difficulties accessing emergency dental care for residents? |

| ORAL AWARENESS |
| What is the number of residents with natural teeth? |
| What is the number of residents with dentures teeth? |

| ORAL HYGIENE PRACTICE |
| What are arrangements for procuring toothbrushes and toothpaste for residents? |
| Do any residents routinely receive assistance in cleaning teeth/dentures? |
| Are staff trained to provide this assistance? |

| DIET AND NUTRITION |
| Do menus assume that all residents have dentures/trouble chewing food? |
| What is the lunch menu for the day of data collection? |
Results
There were 957 valid responses from a target population of 1,185 homes, an 81% response rate; 834 homes were surveyed by postal questionnaire, a 79% response rate (834/1,058) and 123 were interviewed, a 97% response rate (123/127). Seventy per cent (673) of respondents were managers of residential homes; 9% (88) were managers of nursing homes and the remaining 19% (186) were managers of dual purpose care homes.

Table 2 and Figure 1 show responses to questions about arrangements on admission to the home that could facilitate access to dental care. Between LHBs the range of responses varies. Flintshire consistently reports use of written care plans to ask new residents on admission:
• Whether they have some natural teeth - Wales 79% (93% Flintshire to 65% Monmouthshire)
• Whether they have dentures – Wales 82% (95% Bridgend to 65% Blaenau Gwent)
• When they last had a dental check-up – Wales 44% (Flintshire 59% to 19% Vale of Glamorgan)
• Whether they have a dentist – Wales 56% (69% Flintshire to 35% Rhondda Cynon Taf)
• Whether they want to have a dental appointment arranged – Wales 43% (63% Neath Port Talbot to 23% Ceredigion)
• Whether they have any dental problems – Wales 52% (76% Flintshire to 31% Ceredigion).

Almost half of care home managers surveyed stated that there was a mechanism to ensure planned regular dental check-ups for existing residents. Of these, 41% indicated that this formed part of a written care plan (range 82% Neath Port Talbot to 17% Flintshire). This range reflects patterns of care which have evolved locally rather than a planned approach. An additional 34% of Welsh care home managers stated that dental check-ups were arranged on request or when residents had symptoms.

The community dental service (CDS) and the general dental service (GDS) were the two main providers of routine dental care each being the first point of contact for just over 4 out of 10 home managers. For emergency dental care, the community dental service was the first port of call for 42% of managers and the general dental service for 34%. There was considerable variation associated with the split between community dental service and the general dental service as dental care provider. In Flintshire, 86% of homes sought routine dental care from the community dental service whereas in Neath Port Talbot, 82% of routine dental care is provided through the general dental service.

Homes generally first contact the same dental service for emergency dental care as they contact for routine dental care. However, across Wales, managers reported more difficulty in accessing routine dental care for residents than for emergency dental care. Figure 2 shows the percentage of homes ‘always’ reporting problems with accessing routine care, which was 24%. This rises to 40% combining managers who reported ‘always’ and ‘occasional’ problems accessing routine dental care. For emergency dental care, the equivalent rates were 18% and 30%, as shown in Figure 3. Dental access problems in West Wales had featured in the Welsh media in recent years, prior to the survey, and were reflected in the results for Ceredigion and Pembrokeshire.

Nine care homes in Wales had a dental chair or dental suite on site. Three-quarters of care home managers stated that there was space for a chair located close to a sink and 83% of managers reported that the home had a parking space for a large van, potentially allowing dental care to be provided using mobile dental units. However, it is important to highlight that for three LHBs, over 15%

Table 2 Questions relating to new residents -% response (N)

<table>
<thead>
<tr>
<th>Qn</th>
<th>Yes as part of a written care plan</th>
<th>Yes Verbally</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qn 1. Are new residents asked on admission whether they have some natural teeth?</td>
<td>79.3 (759)</td>
<td>12.3 (118)</td>
<td>7.4 (71)</td>
<td>0.9 (9)</td>
</tr>
<tr>
<td>Qn 2. Are new residents asked on admission whether they have dentures?</td>
<td>82.4 (789)</td>
<td>11.6 (111)</td>
<td>4.8 (46)</td>
<td>1.1 (11)</td>
</tr>
<tr>
<td>Qn 3. Are new residents asked on admission when they last had a dental check-up?</td>
<td>44.3 (424)</td>
<td>18.3 (175)</td>
<td>35.4 (339)</td>
<td>2.0 (19)</td>
</tr>
<tr>
<td>Qn 4. Are new residents asked on admission whether they have a dentist?</td>
<td>55.6 (532)</td>
<td>18.7 (179)</td>
<td>22.5 (215)</td>
<td>3.2 (31)</td>
</tr>
<tr>
<td>Qn 5. Are new residents asked on admission whether they want to have a dental appointment arranged?</td>
<td>43.2 (413)</td>
<td>19.9 (190)</td>
<td>34.7 (332)</td>
<td>2.3 (22)</td>
</tr>
<tr>
<td>Qn 6. Are new residents asked on admission whether they have any dental problems?</td>
<td>52.8 (505)</td>
<td>18.2 (174)</td>
<td>27.8 (266)</td>
<td>1.3 (12)</td>
</tr>
</tbody>
</table>
Figure 1 Are new residents asked on admission whether they have any dental problems?

Figure 2 Have there been any difficulties in accessing routine care?

of managers stated that their home did not have a dental chair or suite, and could not provide space for a chair near a sink or parking for a large van. For the residents of homes in these areas, all dental care will need to be provided by transporting residents to a dental surgery.

While 88% of care home managers reported that residents routinely required assistance in cleaning teeth and/or dentures, only 56% believed their staff had received appropriate training to provide this assistance. Figure 4 shows the result of combining answers to these two questions; 34% of managers said that their staff did not receive oral hygiene training yet their residents routinely received assistance in cleaning teeth/dentures.

In response to the questions on dietary assumptions, 28% of managers reported that menus provided daily assumed residents had dentures or trouble chewing food.

Further details of the findings of this survey are available at:
http://www.cardiff.ac.uk/dentl/research/themes/applied-clinicalresearch/epidemiology/oralhealth/index.html
Figure 3 Have there been any difficulties in accessing emergency care?

Discussion

Even with an overall 81% participation rate, this survey has potential for some non-response bias. The survey used face-to-face interviews for a 10% sample, with the remaining 90% targeted for a self completed postal questionnaire. The response rate for interviews was higher at 97% than for postal responses at 79%. This survey suggests that face-to-face interviews, or failing that, telephone interviews, result in a higher participation rate and could therefore reduce the risk of non-response bias.

Examining the reliability of the postal survey against the face-to-face/telephone surveys, the responses given via the two survey methods are different for 10 of the questions. For six questions the responses given by care home managers via interview appeared to more negative compared with postal responses. Four of these questions related to new residents being asked on admission:

- Whether they have dentures?
- When they last had a dental check-up?
- Whether they have a dentist?
- Whether they want to have a dental appointment arranged?

The other two questions for which the true picture may
In the Flintshire area the local community dental service are reported to comply with good practice in this paper. If oral health issues are identified in general dental services which should be provided is part of the process of assessing need. The arrangements in place to ensure that support for oral self care and access to dental care should also be reviewed.

In Wales a considerable proportion of homes do not have written procedures in place to identify individuals with potential oral health care needs and to place them into regular dental care. There is variation in the extent to which written care plans are used across Wales and there is variability in the range of oral health issues these cover.

Access to dental care is a problem for many parts of the UK. It is not surprising that some homes report difficulties in obtaining routine and emergency access to dental care. However, even in areas of Wales where access to dentistry is good, there were reports from managers of difficulty in accessing routine or emergency dental care. It is more common to have difficulty in securing routine dental care for care home residents than emergency dental care. This finding mirrors a study undertaken in the Netherlands where care home residents were likely to receive dental treatment only when they had acute problems (De Baat et al., 1993).

The extreme differences in dental services sourced first, as illustrated in Flintshire and Neath Port Talbot, demonstrate that current patterns of care have evolved rather than having been planned. They demonstrate an opportunity to design a service around the needs of individual care home residents, which appropriately taps into both general dental services and the special care which can be accessed via the community dental services.

Flintshire is noted as an area where care home policies are reported to comply with good practice in this paper. In the Flintshire area the local community dental service have worked closely with their local care homes to develop home oral health policies, procedures and referral arrangements. This demonstrates a level of performance which could be achieved elsewhere by provision of similar support.

While many residents across Wales may need assistance in cleaning teeth or dentures, many of the staff involved had not been trained to provide this assistance. Studies examining nursing staff attitudes to providing oral hygiene support have found that staff do not like undertaking oral hygiene activities (Eddie and Schou, 1992; Wardh et al., 1997). One of the barriers for staff and carers is lack of training (Fiske and Lloyd, 1992; Merelie and Heyman, 1992). This is unfortunate as such training has been shown to impact on knowledge, attitudes and oral cleanliness six months after instruction has been provided (Frenkel et al., 2001). For this survey, even before data collection had finished, some care homes approached local community dental services requesting training for staff who assist residents in cleaning mouths and dentures.

The finding that 28% of managers of care homes in Wales indicated that they do provide diets, which assume residents are unable to chew food, confirms the suspicion of the authors of the National Diet and Nutrition Survey report. When residents already have other health problems such a diet adds little to quality of life and does less to support general health than it potentially could.

Reports of the findings of this survey have been shared with the National Assembly for Wales, and other stakeholders responsible for commissioning and providing dental care services and care home services in Wales. Presentations have been made to Care Forum Wales, the trade organisation for care homes. Since the survey findings have been disseminated there have been a number of local training events. Within the National Assembly for Wales the survey report is informing new partnership work with providers and inspectors of care homes and voluntary bodies including piloting of a modified version of the British Society for Disability and Oral Health assessment tool for health professionals. The tool has been adapted in light of the findings of this survey on oral health content of care plans.

**Recommendations**

- Care home residents with teeth and/or dentures are among those with the highest need for regular dental care and should be prioritised as such for care
- Care home staff should be trained in provision of oral hygiene support to residents
- Care homes should have written admission paperwork underpinning care plans and including dental content
- Community dental services should support homes in developing appropriate policies, procedures and re-
ferral processes
• Dental services to support care homes should be planned so as to draw on the appropriate skills of generalist and specialist dentists
• Information on the dental status and dental care needs of care home residents should be collected and shared to inform planning of dental services and care home menus.

Conclusions

This investigation has highlighted issues relating to systems to ensure regular dental care, issues related to access to dental care, training needs for care home staff and assumptions which affect the diets and menus offered to residents of nursing and residential care homes.

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