

EVIDENCE SUMMARY

Why is access to dental care for frail elderly people worse than for other groups?

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Key Terms:

Frail elderly: Older adults or aged individuals who are lacking in strength and are unusually susceptible to disease or to other infirmity.

Access: a measure of how much dental care a person has received either in absolute terms or relative to health need.

Dental care: care provided by a dental professional involving at least formal examination of oral health and possible treatment.

Background

Oral health is a lifetime concept¹⁵. High quality oral healthcare should be available to all people regardless of their age or circumstances¹⁶. By 2043 it is likely 25% of the population in England will be aged 65 years and over¹⁷. Increasingly dentate, the nature of oral health care need is rapidly changing, leading to more complex restorative treatments and more preventive dental services being required^{18;19}. People aged over 90 years, and those made frail by stroke or dementia, are more likely to require domiciliary care. Help the Aged²⁰ recently stated 'elderly people are suffering because of poor access to dentistry services', with those in care homes or the housebound struggling to see a dentist.

Aim

This review aimed to use research evidence to construct a comprehensive list of the factors believed to cause poor access to dental care by the frail elderly in the

UK, and also try to identify research which shows which of these factors are the most important determinants of access for this group.

Review Method

Ovid MEDLINE (1950 - wk4 August 2009) using above search terms, limited to UK. 30 papers identified. 18 excluded. Two further papers sourced from reference lists. One quantitative study was identified in 14 papers reviewed. Locally developed quality criteria applied. Further searches included CEED, Cochrane Oral Health Group, CRD, IADR, BSDR, ADA, individual journal websites eg. Gerodontology. Literature searches were supplemented by contacting Help the Aged and the British Society of Gerodontology.

Findings

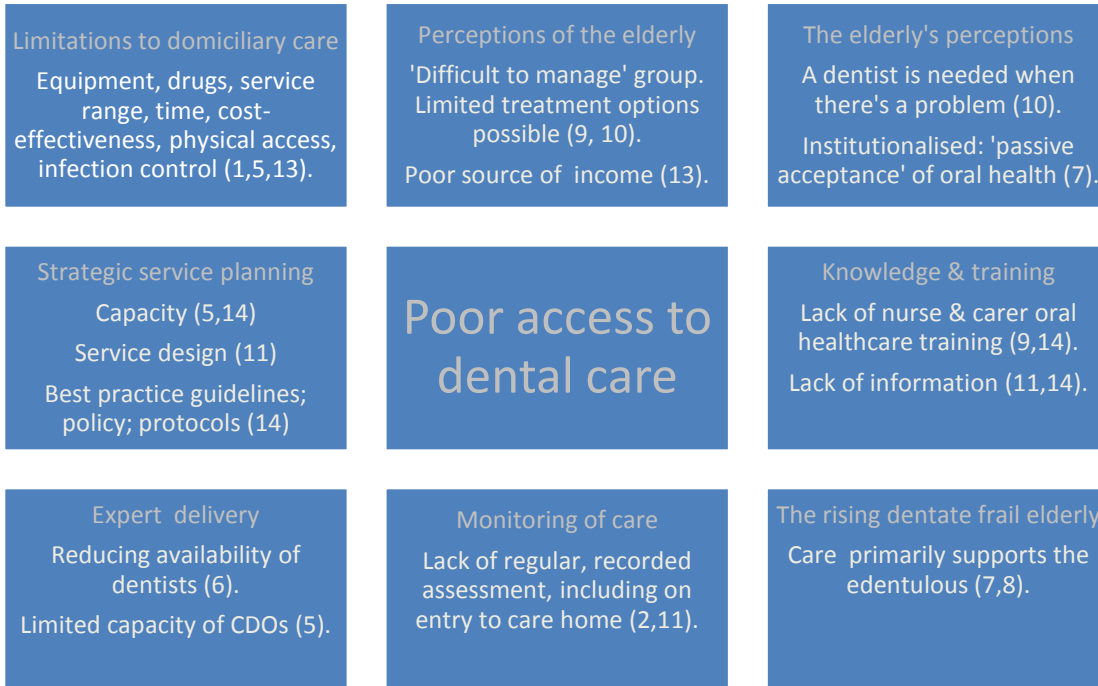
The fourteen studies included in the analysis reported factors affecting access to dental care by the frail elderly (see Table). Half of the studies were conducted before 2000, and nine of the twenty different types of respondent across all studies were care home managers and staff. Three studies^{1,6,13} reported the views of GPs/CDOs, including two since the 2006 introduction of the 'new contract' for dentists. Only three studies^{4,7,10} reported the views of the frail elderly, however these were confined to institutionalised persons. Three studies^{2,4,7} reported oral health assessments, including of the confused elderly, however direct research specific to this special care group appears to be lacking.

Most studies were descriptive, offering a low quality of evidence, and focussing upon the practical, psychological, and information and training challenges of access to dental care. One recent study¹⁴ found very low levels of awareness of 2005 'best practice' guidelines, indicating a gap in research upon the strategic, including commissioning, service design and implementation aspects of dental care for the frail elderly.

One study¹⁰, in 1998, provided a moderate quality of evidence, attempting to quantitatively prioritise the barriers to care in frail and functionally dependent older adults as lack of perceived need, cost of treatment (real or apparent), and transport.

Overall, in terms of the practical aspects of care for the frail elderly it appears that, in the UK, similar barriers to access to dental care for the frail elderly are being reported now as almost twenty years ago. It is unclear, due to a lack of research undertaken/reported, whether recent UK policy developments are having a measurable impact upon access to dental care for the frail elderly.

Factors Associated With Poor Access to Dental Care



Note: number in () is the number of the reference(s) citing this factor

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Table of studies reporting suggested factors that lead to poor access

Ref	Method & participants	Year* and location	'Type' of elderly people	Factors identified
1	Self-administered postal questionnaire by 60 GDPs	2007, N & W Belfast	Community-dwelling elderly people	<p>Limitations of domiciliary care: Lack of appropriate equipment Lack of emergency drugs Limited range of services 'Difficult to manage' group (behaviourally/cognitively) Lack of consent Lack of time Lack of cost-effectiveness Inconvenience associated with service provision Female dentists less likely to provide domiciliary dental care.</p>
2	Telephone interviews with 58 care home managers (independent, voluntary or state-run care homes, residential and nursing). 22 senior and junior staff interviews. 288 residents' oral assessments.	2007, in Greater Glasgow	Residents of residential and nursing homes (average 72% female, and 37% 85 years old)	<p>Low levels of oral health assessment in residential homes (vs nursing homes) on admission, and especially low levels undertaken by a dentist. Low levels of formal mouth care policy in residential homes. Negligible recent auditing of mouth care procedures in nursing and residential homes. Low levels of/or inadequate mouth care training (content and source of expertise). Mouth care not routinely documented. Some carers find mouth care distasteful. Reported reduction in CDS annual dental inspections for institutionalised elderly. Variation between client group's normative and perceived care need. Lack of appropriate written material on mouth care for non-dentists.</p>
3	Self-administered questionnaire by 100 nurses and health care professionals in acute admission areas for elderly, sub-acute unit &	2000; in north west England.	Admissions to hospital wards for the elderly; also residents in	<p>Deficiencies in healthcare professionals' knowledge of appropriate oral care for elderly people. Healthcare professionals' own anxieties about dental attendance.</p>

	designated rehabilitation hospital wards; also 75 nursing staff in four hospital discharge nursing homes.		hospital discharge nursing homes.	
4	41 structured interviews with superintendents, managers or owners of residential care (social services, private and voluntary agency run). 61 interviews with health care staff. 379 structured interviews in 35 homes with residents judged by carers capable of responding meaningfully. Oral examinations of 151 non-confused residents, and later with 102 confused residents.	1988-1990, in Newcastle-upon-Tyne.	Confused and non-confused residents of residential homes. Two-thirds aged 80 years+.	Lack of dental examination on entry to home. Lack of systematic approach to arranging dental treatment. Large variations across individual homes of residents seeing a dentist. Residents' belief they were coping satisfactorily. Lack of transport. Poor health. Low levels of staff oral care training. Lack of staff awareness of cost of dental care.
5	Retrospective audit of 283 new referrals to the Community Dental Service (CDS) for domiciliary dental care.	2000-2001, in one area of West Hertfordshire.	All new patients referred in study period (mean age 74.2 years, all house/bedbound – physically disabled/mental health problems/medical illness; 43% with urgent oral	Meeting new referrals may be at expense of existing house/bedbound clients – total service capacity. High cost of portable equipment. Limited treatment options. Fewer clients seen in a day than in a clinic. Physical strain of lifting & transporting equipment. Service responds to demand, not early detection, prevention and treatment for all elderly.

			problems).	
6	A self-completed postal questionnaire by 96 dentists. A self-completed postal questionnaire by 43 nurse managers of nursing/residential homes.	2002, in BDA Exeter and district section.	Residents of residential and nursing homes.	Rapidly reducing numbers of dentists accepting new NHS domiciliary patients. Increasing levels of dentate elderly. Few dentists willing to carry out conservative treatment. Fee structure problematic. Nurse managers struggle to locate an NHS dentist for a resident.
7	Structured interviews with 412 residents in 22 nursing homes. Clinical examinations with 331 denture-wearing, and 118 dentate residents.	1996-1997, in Avon Health Authority area.	Residents of registered nursing homes designated for sick and infirm elderly people (where complete personal care assumed). Required to have general health that permitted oral examination.	Low level of residents ambulant. Very low levels of recall of last dental attendance in last five years. Low ability of residents to brush their teeth, especially dentures. Mixed levels of staff help with oral health care eg. no daily help for dentate residents. Lack of awareness of advocates to arrange dental care. Failure of residents to report symptoms: 'passive acceptance'. Failure of carers to alert nursing staff to problems. Failure of nurses to act upon residents' expressed needs. Ineffective staff performance in delivering residents' oral health care needs.
8	Open-ended, qualitative questions within a longer quantitative questionnaire with 227 employed carers in 22 nursing homes.	1997, in the Avon Health Authority area.	Residents of registered nursing homes designated for sick and infirm elderly people.	Perceived low prioritisation of oral health by nursing management. Lack of cooperation from cognitively-impaired clients. Lack of training for carers. Lack of arrangements for routine professional dental checks. Lack of provision of oral hygiene aids & cleansing materials eg. shared tooth and denture brushes. Lack of clarity about client/carer responsibility for oral health care, whether dentate or with dentures.
9	Retrospective analysis of 100 patient record cards in	1998, in rural south west	Very elderly patients (75	Limited ability of patients with eg. dementia to cope with treatment. Referral (by patient/carer) due to perceived medical difficulties

	Community Dental Services.	Surrey.	years+) referred to CDS due to medical disabilities.	poorly correlated with actual dental treatment need. Lack of training of primary care dental providers. Insurmountable problems for housebound to attend surgery. Substantial investment in equipment for GDPs to provide domiciliary care. Time away from surgery for GDP – and fixed overhead costs of premises. Management of domiciliary dental treatment is more complex than its technicality. Need to research how the financial aspects of care provision influence the referral process.
10	Structured interviews with 263 frail & functionally dependent older adults in 5 residential homes, 3 sheltered housing complexes and in private accommodation. Questionnaires completed by 115 carers (87 paid, 28 relatives/friends). Multivariate analysis of factors.	1994, in Ware, Herts.	Housebound adults aged 60 years+ who were judged able to co-operate.	Patient perception of need: most patients only attend the dentist when they have problems. Perceived cost, compared to actual cost - poorly understood by people citing cost as a barrier. Other, perceived barriers to dental care: poor health, transport, fear, lack of escort, no dentist available. Most 90 years+ prefer dental treatment in own homes. Younger, paid carers who regularly attend the dentist are more likely to see benefit in dental care for clients. Variations in perceived barriers to dental care between those who do and do not receive care.
11	152 postal questionnaires to supervisors of residential homes for the elderly. Statistical analysis of data.	1991, in the Manchester area.	Elderly people resident in institutions.	Lack of systematic approach to arranging dental treatment. Smaller homes, and privately- run homes had poorer arrangements for, and understanding of residents' oral health care. Lack of regular dental visits, and poor record maintenance of oral health problems. Lack of guidance about when dentate and edentulous residents should see a dentist. Lack of awareness of treatment cost.
12	152 postal questionnaires to supervisors of residential homes for the elderly. Statistical analysis of data.	1991, in the Manchester area.	Elderly people resident in institutions.	Difficulty in carers putting 'felt need' for residents' dental care in to action.

13	1359 self-administered postal questionnaires with general dental practitioners (85%) and community dental officers (15%), in all Health Board areas across Scotland.	2007, in Scotland.	Recipients of domiciliary care.	Concern for infection control: packaging, carriage of contaminated instruments and clinical waste. GDPs mainly provided prosthetic treatment. Lack of suitable equipment eg light source. Lack of emergency essential drugs. Other barriers to provision of domiciliary care: time, poor remuneration, difficulties of carrying equipment. Higher domiciliary workloads in rural/mixed areas than urban practices. Personal safety of dentists.
14	109 telephone interviews with registered nurses and managers in 28 care homes. A cross-sectional analytic survey. 23 telephone interviews with staff in 8 care homes following oral health education intervention.	2008, within the Greater Glasgow and Clyde region.	Residents in 28 care homes.	Inadequate training of staff within care homes about oral health care provision. Lack of knowledge of Scottish NHS best practice statement on oral health of older people. Lack of resident co-operation with oral care provision.

* Year of study where known, or publication date