



Integrating oral health into a dementia care pathway

M.A. Dermont¹ and S.S. Sadaghiani²

¹Dental Public Health, Public Health England, UK; ²Old Age Psychiatry, Worcestershire Health and Care NHS Trust, UK

Public health competencies illustrated:

This paper sets the scene for action that is likely to be required by many practitioners of dental public health as dementia and its implications for oral health and treatment services will affect all communities. It illustrates employment of the following public health competencies:

- Strategic leadership and collaborative working for health
- Policy and strategy development and implementation
- Assessing the evidence on oral health and dental interventions, programmes and services
- Oral health improvement

Initial impetus for action

Dementia is rarely out of the news at present and the announcement of a further £90M in NHS funding to support early diagnosis, research and 'dementia friendly' businesses demonstrates a growing government commitment to tackling the disease. This is laid out in the 2009 National Dementia Strategy (DH, 2009) and more recently in the Government's policy on improving care for people with dementia (DH, 2013). Locally, Birmingham and Solihull councils recently launched their own dementia strategy (Solihull MBC *et al.*, 2013). This is set against the backdrop of a predicted doubling in the number of dementia cases over the next 30 years and a projected trebling in costs (BHWB, 2012; DH, 2013).

From a dental public health perspective it is apparent that a great deal of work is being done across England to address the provision of oral healthcare to vulnerable adults in care homes, including the estimated 80% of residents with dementia or severe memory problems (AS, 2013; BDA, 2012; BSDOH, 2000). This has included oral health training of care home staff and initiatives to improve access to dental services. There is, however, a recognition that these initiatives may come too late for many. By the time an individual with dementia moves into a care home their oral health may have already declined to a worse state than non-dementia patients, due to a severely limited ability to self-care (Chalmers and Pearson, 2005; ECG and BSG, 2006). From this relatively poor starting point the decline occurring whilst in residential care can be dramatic and upsetting.

This paper introduces a project that was started as a personal initiative and which is intended to culminate in improved oral health outcomes for this client group through the collaborative involvement of a number of stakeholders including Birmingham and Solihull Mental Health Foundation Trust (BSMHFT) and NHS Commissioners in the West Midlands. The authors' positions as a Dental Public Health Specialty Registrar training in the West Midlands and a Specialist Registrar in Old Age Psychiatry provide a useful shared vantage point from which to identify both the impact of poor oral health on patients with dementia, as well as opportunities for service improvement in order to tackle issues which cut across both specialties.

A revolutionary approach to the diagnosis and management of dementia has been implemented in the West Midlands by the BSMHFT, based on the concept of early intervention by the Memory Assessment Service (MAS) and this provided an opportunity for innovation.

Early intervention in dementia is about providing patients and carers with a timely diagnosis, helping them to accept their diagnosis and to become actively involved in their own care from the outset. It can offer appropriate wider support and treatment to improve outcomes and quality of life at reduced financial cost (Bentham and Allen, 2011). Patients receive repeated and consistent health messages, named staff contacts and access to wider support that can include legal advice, assistive technology and carer support.

It is widely accepted that an early intervention and preventive approach is similarly beneficial in terms of the oral health agenda. Indeed the publication of Delivering Better Oral Health, the NHS Call to Action and the dental contract reform pilots all have a central theme of prevention (PHE, 2014; NHS 2014). One of the challenges often faced by dental public health professionals is how to move oral health up the broader health agenda in an arena where it can sometimes be perceived as less important or relevant.

The catalyst for this project arose from the author's identification of scope within the existing dementia early diagnosis pathway to include an oral health component and this led to the decision to explore the opportunities for working in conjunction with the BSMHFT to develop an evidence-based strategy.

The authors separately conducted an unpublished review of the literature relating to oral health and dementia which highlighted the strong link between oral and general health, particularly the deleterious effects of poor oral health in neuro-degenerative disorders which can affect wellbeing through impacts on diet and nutrition, behaviour, quality of life, and life-expectancy (Fiske and Hyland, 2000; Fiske *et al.*, 2002; Hyland *et al.*, 2000). These findings are summarised in Table 1. Of particular concern in psychiatry is that dementia patients exhibiting challenging behaviours, termed Behavioural and Psychological Symptoms of Dementia (BPSD), may be prescribed a range of pharmacological agents with potentially harmful side-effects. BPSD can often arise in patients experiencing head and neck pain, particularly from undiagnosed oral pathology combined with an inability to communicate. Furthermore, the incidence of

reported oral pain and discomfort is high (Gluhak *et al.*, 2010; Lobbezoo *et al.*, 2011; ECG and BSG, 2006). Various pharmacological agents such as antipsychotics can result in worsening oral pain and discomfort and increased dental pathology (ECG and BSG, 2006), as well as substantially increasing the risk of stroke and falls (PhVWP, 2005). Figure 1 was produced by the authors to illustrate the potential link between poor oral health, BPSD and the various oral and general health risks posed by some of the pharmacological agents used to treat challenging behaviour. The suggestion is of a cyclical process of deteriorating oral health.

Through discussion and a review of the existing literature, it was apparent that oral and general health and wellbeing are inextricably linked in dementia patients and that the consequences of poor oral health could manifest as increased downstream morbidity and mortality with

Table 1. Possible impacts/implications of poor oral health in dementia patients

Impacts	Implications				
	Earlier institutionalisation	Increased morbidity and mortality	Increased care costs	Increased carer strain	Reduced quality of life
Pain and discomfort	✓	✓	✓	✓	✓
Oral infections and sepsis	✓	✓	✓	✓	✓
Skin infections	✓	✓	✓	✓	✓
Malnutrition and dehydration	✓	✓	✓	✓	✓
Aspiration pneumonia	✓	✓	✓	✓	✓

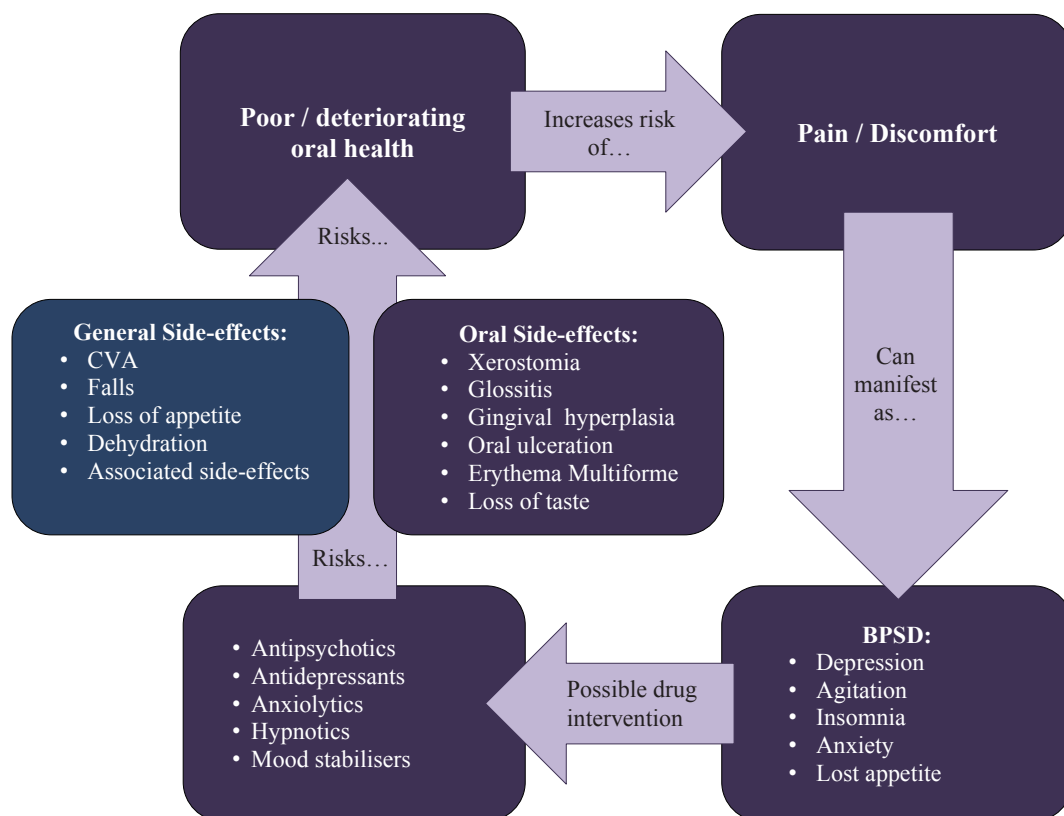


Figure 1. Postulated iterative link between poor oral health and Behavioural and Psychological Symptoms of Dementia (BPSD)

associated care costs. Table 1 below summarises some of the links between the potential impacts of poor oral health and the possible implications for patients with dementia and their carers.

Solutions suggested

The first step was to talk to local psychiatrists specialising in old age psychiatry about their views on early intervention, to see where oral health might fit into the existing structure. From discussion it became apparent that there was no mention of oral health at any point on the existing early diagnosis care pathway, but despite this there was a recognition of shared or common interest.

If oral health could be made a focus from the initial diagnosis of dementia it would offer a number of possibilities. Dementia patients are likely to be at their most physically and mentally capable during the earliest stages of the disease course (0-4 years) when most aspects of oral care should be possible (AS, 2013). Earlier intervention could offer the opportunity to engage patients fully in discussions about their own oral health before cognitive deficits affect mental capacity and difficulties with consent arise.

Difficult decisions over teeth of doubtful long term prognosis could be made at this early stage rather than delaying them until the patient is unable to consent, possibly uncooperative and treatment options become limited.

Additionally, patients and carers could be signposted early to receptive, trained and equipped dental teams, willing to accept dementia patients and attuned to their particular oral health risks and needs. The focus could be on helping patients make treatment choices that would help with long term maintenance of oral health, allied with intensive preventive therapies. Crucially, decisions about the dentition in relation to complex care could be made. In some cases this might lead to the decision to review restorative work and possibly remove teeth but this could be discussed and planned more openly by patient, carer and clinician.

A project outline plan was developed based upon the potential opportunity to integrate oral health principles into the BSMHFT care pathway. Key components of the plan were:

1. To bring together the available evidence of the impacts of poor oral health in dementia patients in a literature review which would focus on illustrating the links between undiagnosed/untreated oral diseases, BPSD, pharmacological intervention and worsening oral and general health (This has been completed as an unpublished standalone resource and some of the references are included in this paper);
2. To link identified oral health impacts to outcomes of likely interest to BSMHFT, such as reduced quality of life, increased morbidity and mortality, carer strain and increased care costs;
3. To engage with relevant stakeholders and work collaboratively to develop a detailed project plan;
4. To work with the BSMHFT Memory Assessment Service (MAS), dental services and service users, using qualitative methodologies to help establish what the existing unmet needs are for improved access to dental services, oral health education, training and support;

5. To work with wider partners such as managed clinical dental networks and Clinical Commissioning Groups to review existing resources and consider the need for an educational package that would be suitable for integration into the existing early intervention dementia care pathway;
6. To evaluate the results through further qualitative work, and
7. To produce recommendations for possible local or national guidelines development

Actual outcome

This project is still at an early stage but some promising initial progress has been made. Findings of the review of the literature were presented at a Multi-Disciplinary Team meeting of BSMHFT's MAS. Support for the project has been offered by BSMHFT's lead consultant psychiatrist and includes support from the research team to carry out qualitative research.

Through the research team it has been possible to secure backing for a number of focus group sessions with early intervention dementia patients and their carers. A project team has been formed and will meet regularly to develop the qualitative work.

Advice is being taken from a local consultant in special care dentistry and a consultant in dental public health to help steer the project.

The next stage of the project plan will be to organise the qualitative focus groups with the aim of determining their various needs. It is hoped that a thematic analysis of the work will yield some key findings which could then be used to develop resources for inclusion in the existing dementia pathway.

Challenges addressed

One of the biggest challenges to-date has been working collaboratively with professionals who are already at close to full capacity with other work projects. Most people are busy and, when presented with a reasonable proposal, they may express a degree of support and interest but this is not the same as actually committing valuable time.

The authors relied on a number of strategies to overcome barriers to securing support and to aid in collaborative working. The aim has been to build credibility and trust. These are essential components of any working relationship.

The issue arose of gaining ethical approval for undertaking the work. This was addressed by establishing early communication with the trust's head of research and development. The aims and methods of the project were discussed with the trust early on and it was established that the project meets the criteria for service improvement. Full research ethical approval will not therefore be required.

Another issue is likely to concern funding. Conducting qualitative focus groups will require additional time and resources. Some of these have been secured by negotiating with the research team. This has served to highlight the importance of establishing a good relationship with key stakeholders in the project. It is hoped that some additional funding could be bid for and potential opportunities are currently being investigating.

Having a means to measure success is crucial if the project is to have any degree of permanence. Initially the use of further qualitative work will provide data on how the project has been received and to track patient journeys.

Perhaps the most fundamental challenge will be in securing enduring change. Evidence of successful outcomes can help but provides no guarantees. One positive result would be to ensure that an oral health component becomes embedded within the dementia early diagnosis care pathway. Similarly, there might be opportunities for exporting a model for success to other regions where early intervention dementia services exist. Ultimately, development of some form of national guidance would probably provide the best long term outcome.

Future implications and learning points

This project is still in its infancy but essential groundwork has been undertaken and shared here and a clear project plan has been developed. This has helped to generate interest as well as helping to clarify the project aims and objectives in the team members' own minds.

It is easier to raise the profile of an oral health issue if opportunities can be identified to embed oral health initiatives into existing general health programmes. An initiative is more likely to be accepted if it is backed by a clear evidence base and can demonstrate measurable benefits to patients through improved outcomes. If economic savings can be identified or it can be linked to elements of existing outcomes frameworks then this will lend the work a far greater chance of success.

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