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Top tips for management of patients with dementia in primary care

Profession(s)

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Oral Hygienist

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Dentist

This activity is approved for **THREE (3) Clinical** Continuing Education Units (CEU's)



Top tips for management of patients with dementia in primary care: Part 1

By Charlotte Curl¹ and Ewen McColl²

Introduction

The Adult Dental Health Survey (ADHS) revealed that over half of older people (aged over 60) are maintaining some, if not all, of their natural dentition.¹ However, although people are 'keeping their teeth' to old age, there is an increased prevalence of tooth decay and dental pain in the older population – with poor dentition increasing more rapidly in those aged 80 and over.¹ One local Joint Strategic Needs Assessment in the UK² estimated that 20% of older adults in the South East and Coastal Region have active tooth decay and 25% of older adults suffer from severe gum disease. Equally, 7% of older adults reported they suffered from dental pain at the time of the survey. For patients living with dementia there is an increased risk of deteriorating oral health – and thus the potential to experience dental pain – brought about by factors such as poor monitoring of oral hygiene and the effects of poly-pharmacy.³ It has been found that dental pain is frequently undetected in people living with dementia – for example, in a US study, Cohen-Mansfield and Lipton⁴ found that up to 60% of their sample of people living with dementia had a dental condition which was likely to cause pain.

Dementia is one of the biggest health challenges facing the NHS in the UK; there are currently 944,000 people living with dementia in the UK and it is estimated that there will be 1.6 million people living with dementia in the UK by 2050. It is imperative that dementia awareness is introduced into the undergraduate curriculum to ensure that in the future, the dental workforce can meet the dental needs of this growing population.

Patients with dementia are increasingly more likely to present in primary care and this short article will provide a number of tips on how primary care practitioners may optimise outcomes in often very challenging circumstances.

Top tips

1. Access to treatment

The first difficulty that people living with dementia experience when seeking dental treatment is accessing dental care and many barriers to this have been cited.

Getting to the dental surgery can be a major challenge in itself with patients reliant on carers/family members to transport them to appointments or patients may be reliant on hospital transport services if treatment is planned in a secondary care setting. Carers are often family members who are also elderly and may not drive; they have many other more pressing issues than bringing their loved ones to appointments. The dental team must be mindful when booking appointments to offer appointments at times when carers can bring patients and allow extra time when they are reliant on hospital transport services. In some regions, domiciliary care is offered but there is a large geographical variation.⁵

Since the introduction of the new dental contract in 2006, dentists can no longer claim a 'call-out' fee for providing home visits and post 2006, general dental practitioners must have a special contract if they want to be paid for domiciliary care. This has limited NHS domiciliary care to few general



Table 1 Surgery design, adapted from A. Geddis-Regan *et al.*, *Primary Dental Journal*, 2020⁹

Design aim	Methods which may be used to achieve this aim
To achieve familiarity	Staff to greet the patient and carers on arrival Use of pictures of local landmarks to decorate the walls of waiting areas and corridors
To provide clear visibility	Maximise natural lighting in all areas, particularly corridors where bright light and/or deep shadows should be avoided Consider the use of mood lights in surgeries Use a matt/satin finish for walls in surgeries to make important areas stand out such as entrance/exit to surgery and the toilet door
Provide multiple clues to orientate the patient	Clear signage into the building and to and from the waiting area, preferably at eye level; these should be easy to read and in a large font Consider the use of pictures/symbols but avoid stylised or abstract images Signs should be fixed to the doors they refer to and not an adjacent surface Glass doors should be clearly marked Use of large faced analogue clocks on the walls Staff should wear name badges and introduce themselves
Minimise distractions	Avoid noisy communal spaces and clutter Be aware of distracting background noise in the surgery which may make it difficult to focus
Relieve stress	Matt/satin finish on floor surfaces (shiny floors may be perceived as wet or even rivers) Use plain floor coverings (mottled floor may be perceived as debris on floor) Ensure changes in floor levels may be easily distinguished Handrails should be available in corridor areas Accessible parking and suitable toilets, preferably with a changing place Make communal areas a safe haven for those wandering in the area Ensure that seating is an appropriate height, preferable with armrests, to help the person rise when standing

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« dental practitioners and salaried services and the number of domiciliary visits being carried out has diminished. Services offered on a domiciliary basis vary from screenings in residential care homes to simple treatments being carried out in patients' homes or mobile dental units.⁶ For practitioners considering carrying out domiciliary dental services, guidelines relating to domiciliary dental care may be accessed via the British Society of Special Care Dentistry (BSSCD) (formerly the BSDH) website (<https://www.bsdc.org/>).

In addition to the difficulties in attending appointments, another barrier to accessing dental treatment is financial. In the UK, there is a lack of NHS treatment charge exemption based on either age or cognitive impairment so patients not receiving any government benefits are liable to pay full NHS charges for dental treatment.

2. Designing a practice suitable to provide care for patients living with dementia

Meeting the needs of patients living with dementia will require some adaption of the practice environment and the way that dental services are offered.⁷ All members of the team can be involved in the process of welcoming the patient to the surgery and it is useful for the team to be informed beforehand that a patient with a cognitive impairment is due to attend, particularly if they are attending alone in the early stages of the disease.

Equality legislation in the UK has ensured that reasonable adjustments are made to support people with disabilities to give them the right to equal standards of health and care. Regarding the practice environment, for patients living with dementia, much research has been carried out in hospital and general practice settings as to how to achieve a calm, safe environment for patients. This can be translated into a dental setting.^{8,9} Table 1 gives some useful pointers as to how to adapt surgery settings to improve the environment for people living with dementia. They are informed by the Department of Health's comprehensive guidance.¹⁰

Figure 1 shows how simple yellow and black signs at the correct height make the dental experience more inclusive for those accessing services.

Communication

Often people with dementia have limited communication skills and struggle to express themselves verbally.¹¹ Communication is vital for taking a medical history, dental history and pain history. If a patient is able to communicate, they will be less anxious about having dental treatment so it is important that the patient living with dementia is supported to communicate more effectively.

It is useful if the patient is accompanied by someone who knows them well such as a carer, relative or friend who may be able to support them in giving a history and formulating a treatment plan. If the patient consents, the accompanying person may be involved in discussion about their treatment and their overall care and they may also aid them in completing the relevant paperwork when applying for exemptions to dental payments.

The communication of dental pain is particularly important and in the later stages of the disease, it may be very difficult to determine whether a patient with dementia is experiencing dental pain. Non-verbal cues may indicate pain such as frowning,

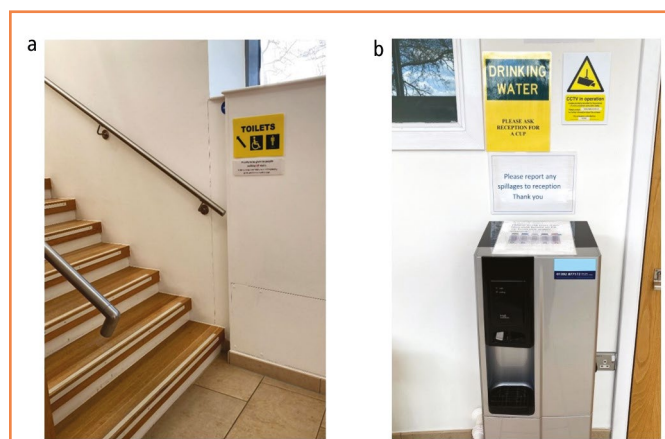


Fig. 1 Simple yellow and black signs at the correct height make the dental experience more inclusive for those accessing services

drooling, grimacing, face holding or screaming.¹² Changes in behaviour may also be noticed such as trouble sleeping/relaxing, anger, refusal to eat or maintain oral hygiene procedures and difficulties in wearing dentures. Carers are often best placed to see the signs and symptoms of oral pain and discomfort as they care for the person all day.

The presentation of written information to people living with dementia and their carers needs to be carried out thoughtfully. Frequently, people with dementia have other comorbidities such as visual and hearing impairments and both people living with dementia and their carers are often not accustomed to using digital media for imparting information.

Point size of text should be large as elderly people with dementia often have visual impairments, 14pt is ideal and Arial/Times New Roman is recommended as a font as they are uncluttered and do not have 'curly bits' and serifs.¹³

Training

It is imperative that dementia awareness is introduced into the undergraduate curriculum to ensure that in the future, the dental workforce can meet the dental needs of this growing population.

There is a need for current staff training to raise awareness of dementia and to provide better care. The Alzheimer's Society provides training and produces supporting materials which can be used in the practice (<https://www.alzheimers.org.uk/>).

Health Education England has produced an excellent training video entitled 'The Appointment' which highlights a patient living with dementia's visit to the dentist and can be used for staff training within practices (<https://thamesvalley.hee.nhs.uk/dental-directorate-thames-valley-and-wessex/dementia/the-appointment/>).

Conclusions

General dental practitioners will increasingly be managing patients with dementia at various stages of progression. The tips provided above will help in managing patients and communicating with patients and family members alike. Often small changes as suggested above can make a big difference to patients with dementia. In the second part of this series we discuss clinical management at various stages. ■

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University of Plymouth shortlisted for prestigious accolade

The University of Plymouth's work to combine first-rate dental training with outstanding community care has been shortlisted for a prestigious accolade in the Times Higher Education Awards 2023.

The pioneering work of the Peninsula Dental School and the Peninsula Dental Social Enterprise is in the running to win the Outstanding Contribution to the Local Community category.

It recognises the efforts of more than 100 staff and 400 students working and studying with the University, and in communities across Devon and Cornwall.

It is also the second award shortlisting in a week for the University's dentistry team, after the Peninsula Dental Social Enterprise was named among the finalists in the UK Social Enterprise Awards.

The Peninsula Dental School was originally established to tackle oral health inequalities in the South West, and to train dentists who would stay in the region once qualified.

In 2013, it also established the Peninsula Dental Social Enterprise (PDSE) to treat patients who may not otherwise have access to care. In 2021/22, the period covered by the awards, students registered with the Peninsula Dental School – and working at clinics run by PDSE – saw almost 5,600 patients across Devon and Cornwall.

Over the course of 28,000 appointments, 418 dental and hygiene therapy students were able to deliver crucial primary care to many of the more vulnerable members of society, including those experiencing homelessness and other forms of social exclusion.

Through an Inter-Professional Engagement Module, dental and dental therapy students had the opportunity to work directly with one of 14 host organisations caring for children, people with learning difficulties, older people at risk of isolation, young carers, those experiencing homelessness, and those living in social housing.

A Supervised Tooth Brushing Programme, led by academics and students, worked with pupils at 146 primary schools to provide advice and guidance on the benefits, and most effective methods, of brushing their teeth.

More than 3,000 children aged 16 and under, who are unable to register with a dentist, were seen at paediatric oral health clinic while a Looked After Children clinic provided treatment to 96 children and unaccompanied young asylum seekers.

Ewen McColl, Head of the Peninsula Dental School, said: 'This shortlisting is a fantastic achievement for everyone connected with the Peninsula Dental School and Peninsula Dental Social Enterprise. It is further evidence that our approach is yielding benefits, both for our students and staff but the communities of Devon and Cornwall as well. With widespread talk of a crisis in access to NHS dentistry, this positive recognition could not be more timely.'

The winners of the Times Higher Education Awards 2023, widely regarded as the Oscars of Higher Education, will be announced at a ceremony in December.

BDJ Student launches manuscript submission platform

BDJ Student has launched its own submission platform, enabling potential authors to better track and monitor the progress of their article.

The platform will provide dental students with a greater understanding of the publishing process and streamline manuscript tracking and processing on the editorial side.

BDJ Student is designed specifically for first to fifth year dental students. Through a mix of clinical content, careers advice and news, its focus is to give students the tools to succeed throughout university, and beyond. Content is published online every month, steered by Editor David Westgarth, who also edits *BDJ In Practice*.

For *BDJ Student* author information, visit <https://www.nature.com/bdjstudent/for-authors>.

To submit a paper to *BDJ Student*, visit <https://mts-bdjstudent.nature.com/cgi-bin/main.plex>. A 'Submit manuscript' link is also located on the *BDJ Student* homepage: <https://www.nature.com/bdjstudent/>.



EBD invites systematic reviews of antimicrobials in dentistry

BDJ Portfolio publication *Evidence-Based Dentistry* (EBD) has launched a new collection on 'Antimicrobials in Dentistry' and is open to submissions of systematic reviews, with a closing date of 31 July 2024. A themed issue on this topic is planned for December 2024.



SCAN ME

Approximately one-tenth of all antimicrobials used globally are prescribed by dentists. They are most frequently used in urgent care cases rather than routine dentistry, and although considered appropriate for the treatment of certain infections and ailments, they are sometimes less appropriately prescribed for other conditions (eg dry socket). Whilst antimicrobials can be immensely useful, dentists have an important role to play in helping to tackle the threat of antimicrobial resistance. This collection gathers together the best evidence about the use, and the consequences of misuse, of these important drugs.

To visit the collection use the QR included with this story or <https://www.nature.com/collections/fbbbebjeh>.

BDJ Team publishes neurodiversity and dentistry series

BDJ Team, the BDJ Portfolio's online publication for dental care professionals (DCPs), has just published the fourth part of its exclusive series on neurodiversity and dentistry.

The aim of the series is to promote a more accessible and inclusive culture in dentistry, where neurodivergence is understood, accepted, and destigmatised for the benefit of neurominority patients, students, and staff.

Parts 1–3 raise awareness of neurodiversity; explore oral health considerations; and adopt the social model of disability to create neuro-inclusive dental environments.

Part 4, which was published just ahead of National Inclusion Week 2023 for employers (25 September–1 October), focuses on reducing inequalities through neuro-inclusive communication.

In the article authors Jasmine Murphy, Fiona Andrews and Maria Morgan state that: 'By taking purposeful measures, the dental team can ensure that their communication is effective and reflects the diverse ways people process and receive information.'

'Taking a neuro-inclusive approach will not only serve to improve oral health and reduce inequalities for neurominority people but will benefit all patients.'



Parts 1–3 of the series have collectively been visited on the *BDJ Team* website over 3,000 times since their publication.

To browse all of *BDJ Team*'s content on neurodiversity and dentistry, visit the collection at: <https://www.nature.com/collections/neurodiversity>.

SDG COLUMN

An update on waste disposal in dentistry



Continuing with our cover series on the UN's Sustainable Development Goals (SDGs), we reach SDG 6: Clean Water and Sanitation. Our focus for this issue's cover was to illustrate how we can reduce waste and keep the water source clean, helping our tap water stay safe for all to drink. **Sheryl Wilmott**¹ and **Brett Duane**² situate SDG 6 within dentistry by providing an update on a previously published book chapter of theirs which explored responsible waste management, the first half of which has been republished in this issue of the *BDJ*. In doing so, the authors demonstrate how proper segregation of waste translates to a positive impact on the quality and availability of clean water.

In this article, we provide an update on 'Responsible waste management: using resources efficiently',¹ a chapter from *Sustainable Dentistry* which has been partially republished in this issue of the *BDJ*.² Here, we aim to use updated life cycle assessment (LCA) data to highlight how proper segregation of waste is an easy and low-cost way to reduce the environmental impact of care, with wide-reaching global health impacts, including the impact on the quality and availability of clean water.

Proper waste segregation is necessary because the wide range of products that we use in dental practice each need to be disposed of in a way that minimises their impact on the environment and that limits the damage that they can cause to human health. This is a legal, ethical and professional duty. The updated waste hierarchy adapted for clinical waste includes 'correctly segregate' as second to only prevention as the most desirable way to manage clinical waste.³

To establish a comprehensive waste management strategy, it is essential to focus on waste reduction, reuse, recycling, and responsible disposal to minimise environmental harm while maximising resource recovery and economic benefits.

For six healthcare waste streams, an LCA was performed using OpenLCA v2.0 software and the Ecoinvent v3.91 reference database.^{4,5} The methodology

of the LCA followed the recommendations of the International Standard Office and the European Commission's Product Environmental Footprint guidelines (ISO, European Commission, 2018).⁶ The main outcome of the LCA was a life cycle impact assessment (LCIA) consisting of 25 environmental impact categories. Each impact category and its corresponding LCIA method and units have been described in other papers.

'It is essential to focus on waste reduction, reuse, recycling and responsible disposal'

Figure 1 shows the data from an LCIA of the disposal of 1,000 kg of six of the waste streams produced in healthcare environments. Each impact category was recalculated based on amended workings in line with Duane *et al.*⁷ Each impact category row has been formatted, from low impact (green) to high impact (orange), which clearly shows that disposal of the contaminated waste stream has the highest impact on the environment and human health, followed by disposal of plastic waste.

Figure 2 shows the impact of six healthcare waste streams on human health in disability

adjusted life years (DALYs). Over 91% of the total DALYs from disposal of the six waste streams are associated with the effects of global warming. Less than 8% are associated with water consumption and the rest make up 1% of the total.

There is notable variation in the environmental and human health impacts of disposal of different healthcare waste streams, but contaminated waste followed by plastic waste make a substantial contribution. Reducing the use of single-use plastics and ensuring that only appropriate waste is disposed of in the contaminated stream can reduce this impact.

There are three LCA impact categories that specifically relate to water quality (blue):

1. Natural **acidification** can take place, such as when volcanic eruptions release acidic sulphur dioxide into the atmosphere. However, contemporary rises in emissions of sulphur dioxide (SO₄) and nitrogen oxides (NO(x)) from human industrial endeavours lead to a reaction with rainwater, resulting in the formation of acid rain. This, in turn,

can lower the pH levels of the soil upon which it descends. Acidification has consequences for plant health and can disrupt the equilibrium of agriculture and the food chain. Given that acidification is predominantly driven by human actions, adopting sustainable practices can effectively mitigate its impact.⁸ Figure 1 shows that disposal of contaminated waste has a high impact on acidification; this is likely due to the incineration processes involved

2. **Eutrophication** is the term used to describe environments that have

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Fig. 1 Life cycle impact assessment of the disposal of 1,000 kg of six of the waste streams produced in healthcare environments

Impact category	Food waste	Contaminated waste	Plaster waste	Plastic waste	Cardboard waste UK	Landfill waste	Unit
Acidification – accumulated exceedance (AE)	0.09	2.54	0.05	0.46	0.33	0.04	mol H ⁺ -Eq
Climate change – global warming potential (GWP100)	23.54	1552.62	6.08	1596.45	548.51	784.02	kg CO ₂ -Eq
Climate change: biogenic – global warming potential (GWP100)	1.27	0.89	2.40E-03	0.10	508.66	741.34	kg CO ₂ -Eq
Climate change: fossil – global warming potential (GWP100)	22.26	1551.14	6.08	1596.33	39.83	42.68	kg CO ₂ -Eq
Climate change: land use and land use change – global warming potential (GWP100)	2.91E-03	0.59	3.67E-03	0.02	0.02	0.00	kg CO ₂ -Eq
Ecotoxicity: freshwater – comparative toxic unit for ecosystems (CTUe)	108.23	52762.28	71.09	3418.58	2773.61	3034.65	CTUe
Ecotoxicity: freshwater, inorganics – comparative toxic unit for ecosystems (CTUe)	13.90	52611.13	66.98	3405.52	2756.43	3025.48	CTUe
Ecotoxicity: freshwater, organics – comparative toxic unit for ecosystems (CTUe)	94.33	151.15	4.11	13.06	17.18	9.17	CTUe
Energy resources: non-renewable – abiotic depletion potential (ADP): fossil fuels	106.98	10615.61	152.53	537.89	435.78	0.00	MJ, net calorific value
Eutrophication: freshwater – fraction of nutrients reaching freshwater end compartment (P)	1.02E-03	0.14	5.06E-04	0.01	0.01	0.07	kg P-Eq
Eutrophication: marine – fraction of nutrients reaching marine end compartment (N)	0.01	0.67	0.02	0.98	0.76	1.01	kg N-Eq
Eutrophication: terrestrial – accumulated exceedance (AE)	0.35	6.83	0.19	2.17	1.27	3.68E-03	mol N-Eq
Human toxicity: carcinogenic – comparative toxic unit for human (CTUh)	1.25E-09	5.95E-07	2.60E-09	2.74E-07	1.41E-07	4.06E-08	CTUh
Human toxicity: carcinogenic, inorganics – comparative toxic unit for human (CTUh)	7.34E-10	2.74E-07	1.19E-09	1.30E-07	5.63E-08	4.06E-08	CTUh
Human toxicity: carcinogenic, organics – comparative toxic unit for human (CTUh)	5.12E-10	3.21E-07	1.41E-09	1.44E-07	8.49E-08	0.00E+00	CTUh
Human toxicity: non-carcinogenic – comparative toxic unit for human (CTUh)	1.12E-06	9.20E-06	3.27E-08	5.33E-06	3.55E-06	1.84E-06	CTUh
Human toxicity: non-carcinogenic, inorganics – comparative toxic unit for human (CTUh)	2.67E-08	8.89E-06	2.95E-08	5.25E-06	2.63E-06	4.89E-07	CTUh
Human toxicity: non-carcinogenic, organics – comparative toxic unit for human (CTUh)	1.09E-06	3.13E-07	3.22E-09	7.45E-08	9.16E-07	1.35E-06	CTUh
Ionising radiation: human health – human exposure efficiency relative to u235	0.46	89.30	9.59E-02	0.93	1.10	0.00	kBq U235-Eq
Land use – soil quality index	11.62	2254.71	300.66	402.89	371.10	375.85	dimensionless
Material resources: metals/minerals – abiotic depletion potential (ADP): elements (ultimate reserves)	1.29E-05	6.14E-03	8.61E-06	1.49E-04	1.16E-04	0.00	kg Sb-Eq
Ozone depletion – ozone depletion potential (ODP)	5.25E-08	1.32E-04	1.76E-07	1.92E-06	1.22E-06	0	kg CFC-11-Eq
Particulate matter formation – impact on human health	4.62E-07	2.52E-05	1.00E-06	1.26E-05	6.98E-06	2.73E-08	disease incidence
Photochemical oxidant formation: human health – tropospheric ozone concentration increase	9.85	2.32	0.07	0.60	0.55	0.29	kg NMVOC-Eq
Water use – user deprivation potential (deprivation-weighted water consumption)	25.71	346.58	0.47	62.28	47.41	0.00	m ³ world eq. deprived

Fig. 2 The impact of six healthcare waste streams on human health (in DALYs)

Category	Food waste	Contaminated waste	Plaster waste	Plastic waste	Cardboard waste UK	Landfill waste	Total
Global warming – human health	2.18E-05	0.001	5.64E-06	0.001	0.001	0.001	4.19E-03
Stratospheric ozone depletion – human health	2.79E-11	7.02E-08	9.34E-11	1.02E-09	6.48E-10	0.00E+00	7.20E-08
Ionising radiation – human health	3.91E-09	7.59E-07	8.15E-10	7.87E-09	9.32E-09	0.00E+00	7.81E-07
Fine particulate matter formation – human health	2.91E-10	1.59E-08	6.31E-10	7.95E-09	4.39E-09	1.72E-11	2.92E-08
Photochemical ozone formation – human health	8.63E-06	2.04E-06	5.75E-08	5.24E-07	4.83E-07	2.57E-07	1.20E-05
Toxicity – human health (cancer)	4.14E-15	1.98E-12	8.62E-15	9.11E-13	4.69E-13	1.35E-13	3.50E-12
Toxicity – human health (non-cancer)	7.43E-15	6.12E-14	2.18E-16	3.54E-14	2.36E-14	1.22E-14	1.40E-13
Water consumption – human health	1.89E-05	2.55E-04	3.49E-07	4.58E-05	3.49E-05	0.00E+00	3.55E-04
DALY (years)	4.94E-05	1.70E-03	6.05E-06	1.53E-03	0.001	0.001	4.55E-03
DALY (days)	0.018	0.620	0.002	0.558	0.199	0.266	1.66
DALY (hours)	0.43	14.88	0.05	13.38	4.77	6.38	39.89

an excess of minerals and nutrients, resulting in the excessive growth of algae. As these algae die and break down, they deplete the oxygen levels in the water, which can lead to the death or displacement of various plant and animal species. Nitrogen oxide emissions represent just one of several factors contributing to eutrophication.⁹ Figure 1 shows that landfill waste impacts both marine and freshwater eutrophication, likely due to leachate entering the water table

3. **Ecotoxicity** is a gauge of the disruptive influence exerted by toxic compounds on freshwater ecosystems. These harmful substances have the potential to move from aquatic settings, such as sources of drinking water, to various animal species, which could subsequently be part of the human food chain. These toxins include materials like microplastics, chemicals, and substances detrimental to life. Both food waste and contaminated waste contribute to ecotoxicity in the environment.¹⁰

In addition to the above measures of water pollution, ‘**Water use – user deprivation potential**’ describes a combination of the volume of freshwater consumed and the water stress index of the region where that water has been extracted. The use of the same amount of water in a region of water scarcity will have a larger impact on the deprivation potential.¹¹

These findings highlight how waste reduction, reuse, recycling, and responsible disposal, including proper segregation of waste, are low-cost ways for the dental practice to reduce environmental harm and harm to human health, and support the availability and quality of our water supplies.

The following practical steps can be taken by dental practices:

- Education – Regular refresher courses in waste management are ‘critical’ for healthcare professionals.¹² Dental staff can access Healthcare Waste Management and Disposal training on the e-learning for health portal¹³
- Guidelines – In addition to segregating waste into recycling, domestic and clinical waste, Domain 3 of the recently published *Clinical guidelines for environmentally sustainable dentistry* (2023) recommends raising awareness and implementing behavioural change programmes, as well as providing clear guidance and labelling of bins. Education organisations should also highlight the planetary and human health benefits of proper segregation of clinical and non-clinical waste¹⁴
- Action – Dental practice staff can undertake an in-house comprehensive waste audit or a bin placement survey. Information for how to carry these out can be found in ‘Responsible waste management: using resources efficiently’.¹ ■

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Top tips for management of patients with dementia in primary care: Part 2

By Charlotte Curl¹ and Ewen McColl²

Introduction

Dementia is one of the biggest health challenges facing the NHS. In the UK, there are currently 944,000 people living with dementia and it is estimated that there will be 1.6 million people living with dementia in the UK by 2050. In the previous article, we discussed some practical tips for managing such patients in general dental practice. In part two, we discuss clinical management as the illness progresses.

Top management tips

Care planning for people living with dementia

When planning dental care for people living with dementia, it must be noted that dementia is a degenerative disease and there will be a decline in oral and general health as the disease progresses.

The first approach should be to establish the overall aim in treatment; this will vary dependent on whether the treatment is urgent or elective and should be established in conjunction with the patient +/- carer. The stage of dementia must be considered as this relates to the patient's symptoms, capacity to consent to dental treatment, ability to cope with treatment, oral hygiene procedures and dietary intake.¹

It is helpful to classify a patient according to the stage of the dementia as described by the World Alzheimer Report: Early, Middle or Advanced.²

Treatment in early stages of dementia

Most patients with early dementia will access dental treatment at a general dental practice and may not require additional support from carers. In many respects, the input from dental professionals at the earliest stages of the disease is the most important as it can pre-empt and prevent future dental pain and infection.

In the early stages, a decline in oral and general health will be anticipated and decisions about future care may be had with the patient while they still can reason effectively. The process whereby a patient's wishes are recorded to preserve autonomy when they lose capacity to make their own decisions is called advanced care planning.³

Questions that may be addressed in an advanced care plan are:

- What matters most for them in dental care?
- If they have toothache, would they prefer to have an extraction or attempt to save the tooth?
- How important is it for them to keep all of their front teeth?
- Are they happy to have gaps in their mouth if teeth are extracted or would they want to have something to fill the gap?
- Would they like to have dentures if they have missing teeth?

Recording of a patient's preferences can help to ensure that any decisions about dental care made under a best interests decision align with their values or wishes as specified in the Mental Capacity Act.⁴

The aims of treatment in the early stages are to eliminate and prevent pain, control infection and prevent new disease. At this stage,

most restorative and rehabilitative care is possible. Treatment should be planned anticipating the person's decline in cooperation and ability for self-care. A full dental assessment should be carried out including radiographs and periodontal screening. High quality restorative work should be completed that requires low maintenance as the disease progresses and oral hygiene becomes more difficult to maintain. Key teeth can be identified (eg canines, molars, occluding pairs) and restored to function.⁵

'Aggressive prevention' and regular recall has been recommended at this stage.⁶ Examples of aggressive prevention may include:

- Custom-made mouthguards with reservoirs which can be loaded with standard 1450 ppm fluoride toothpaste and worn overnight or for a couple of hours per day⁷
- Adaption of oral hygiene aids, for example adaption of toothbrush handles with impression putty so that they can be gripped more easily when dexterity becomes impaired
- Six-monthly application of fluoride varnish to the teeth
- Prescription of high fluoride toothpaste to be used twice daily.

In the early stages of dementia, well-fitting dentures should be constructed that teeth can be added to in the future in the event that further teeth are lost. It is advisable that dentures are marked with the patient's name during the construction process as people living with dementia often lose dentures, particularly in care homes.⁸

Treatment in the middle stages of dementia

In the middle stages of dementia, patients may still access dental treatment from their general dental practitioner with support from informal/formal carers but it may be necessary to refer them to specialist services who offer treatment under sedation or general anaesthesia if co-operation has become impaired and they require more than a check-up appointment.

'Aggressive prevention' and regular recall appointments must be continued and carers will be relied on more to help with oral hygiene procedures and encourage self-care. It is useful to carry out periodontal assessments and radiographs where possible as these may highlight areas of periodontal bone loss and teeth of poor prognosis which may become more mobile as dementia progresses; it may be advisable to extract teeth of poor prognosis which will act increasingly as plaque traps as the disease progresses. Prevention is paramount and must be reinforced with the patient and carer. High fluoride toothpastes may be instituted and consideration given to a six-monthly application of a fluoride varnish.⁹ Carers may be given specific training in how to support oral hygiene with the use of electric toothbrushes and personalised dietary advice.¹⁰

In the middle stages of dementia, mental capacity may be retained but may fluctuate daily so it is imperative that mental capacity



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« assessments are carried out and recorded and patients are given extra support so that they remain involved in any decision-making about their care.

Dental treatment in the advanced stages of dementia

In the advanced stages of the disease, the goal of the dental practitioner is to diagnose and manage dental pain and support the maintenance of oral hygiene. The diagnosis of pain may become difficult as cognitive function declines and frequently patients are assessed as not having the capacity to give informed consent to dental treatment or even understand what is happening as treatment is carried out. Some patients can be more comfortable and lucid in their own home environments¹¹ and screening, examination and simple treatment could be carried out on a domiciliary basis rather than in a dental practice.

Generally, the later stages of the disease pose the most challenges for the dental practitioner because the person living with the disease tends to be:

- Older
- More frail with an increasing number of co-morbidities
- Less able to communicate/express themselves
- Lacking capacity to consent to dental procedures or understand what is happening to them.

Dental interventions should be kept as non-invasive as possible; eg using Carisolv for caries removal, atraumatic restorative techniques (ART) such as glass ionomer cement restorations, regular use of chlorhexidine varnish to control root caries.¹²

If treatment is beyond the individual's coping capacity is required two questions need to be asked:

- Is the treatment necessary?
- How can it best be carried out?

In the absence of symptoms, treatment can offer a lesser benefit and can adversely affect aesthetics, masticatory function and quality of life,¹³ so it may be better to leave some conditions untreated and merely monitor them over time. For example, it may be appropriate to retain asymptomatic retained roots/failing complex restorative treatment which would be complex to manage.

When making decisions about whether treatment should be carried out, the impact that the proposed treatment will have must be considered.

If it is deemed that the patient should have dental treatment carried out, the dental practitioner should only offer treatment if they feel that they are competent to do so and it may be necessary to refer the patient to Specialist Services. Often, patients living with advanced dementia will require sedation or general anaesthesia for dental treatment to be carried out but clinicians considering offering these treatment modalities must be aware of the physiological changes and commonly occurring diseases that are found in this age group which may affect the pharmacodynamics of drugs used for sedation or general anaesthesia.¹⁴

Conclusions

Clinicians will increasingly be faced with managing patients with dementia. In this series of two articles we have offered some practical steps and tips on how best to manage these most deserving of patients. Staying pragmatic and thinking laterally in order to provide practical outcomes will remain key and the advice in this series will

hopefully help hard pressed clinicians in managing patients with dementia as they present more frequently in their practices. ■

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QUESTIONNAIRE

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Top tips for management of patients with dementia in primary care

INSTRUCTIONS

- Read through the article and answer the multiple-choice questions provided below.
- **Some questions may have more than one correct answer;** in which case you must mark **all** the correct answers.

Part 1

Introduction

Question 1: The Adult Dental Health Survey (ADHS) revealed which of the following?

- A: Less than 50% of older people (aged over 60) are maintaining some of their natural dentition
- B: There is an increased prevalence of tooth decay and dental pain in the older population
- C: Poor dentition increases more rapidly in those aged 80 and over

Question 2: It has been found that dental pain is in people living with dementia, and according to a US study, it was found that of their sample had a dental condition which was likely to cause pain?

- A: Frequently undetected | about 25%
- B: Frequently detected | less than 50%
- C: Sometimes undetected | less than 30%
- D: Frequently undetected | up to 60%

Question 3: Which of the following are challenges for carers in getting patients with dementia to the dental surgery?

- A: Carers are often family members who are also elderly and might not drive
- B: Carers may have many other more pressing issues than bringing their loved ones to appointments

Question 4: Is it **TRUE** or **FALSE** that meeting the needs of patients living with dementia will require some changes to the practice environment and how dental services are offered?

- A: TRUE
- B: FALSE

Question 5: Regarding communication with a person with dementia, which one of the following statements is **INCORRECT**?

- A: They might be anxious about having dental treatment, and if possible, communicating with them can alleviate this anxiety
- B: They must be supported to communicate more effectively
- C: It is useful if the patient is accompanied by someone who knows them well and can support them in giving a history and formulating a treatment plan.
- D: None of the above

Question 6: Which of the following are **changes in behaviour** that may indicate pain in a patient with dementia?

- A: Drooling
- B: Refusal to eat
- C: Difficulties in wearing dentures
- D: Grimacing
- E: Refusal to maintain oral hygiene procedure

Question 7: Is it imperative that dementia awareness is introduced into the undergraduate curriculum to ensure that, in the future, the dental workforce can meet the dental needs of this growing population?

- A: YES
- B: NO

Part 2

Question 8: In planning care for patients with dementia which of the following should **NOT** be an option?

- A: Establishing the overall aim in treatment as treatment goals may shift continuously due to the condition of the patient
- B: Establishing whether the treatment is urgent or elective
- C: Making all the decisions for the patient who is unable to do so for himself
- D: To consider the stage of dementia

Question 9: Advanced care planning encompasses which of the following?

- A:** Recording a patient's wishes to preserve autonomy when they lose mental capacity
- B:** Deciding about future care for the patient while they still can reason effectively
- C:** Deciding on behalf of the patient what they will need in future

Question 10: The aim of treatment in the early stages of dementia is

- A:** Mainly pain prevention
- B:** Concentrating on aggressive infection control while the patient can still visit the dentist without too much regard for pain
- C:** Keeping the normal dental routine
- D:** Eliminating and preventing pain, controlling infection and preventing new disease

Question 11: Treatment should be planned, anticipating the person's decline in cooperation and ability for self-care by doing which of the following?

- A:** A full dental assessment should be carried out, including radiographs and periodontal screening
- B:** A detailed dental assessment should be carried out without radiographs as radiation to the head and neck are thought to accelerate dementia processes
- C:** High-quality restorative work that requires low maintenance should be completed as the disease progresses
- D:** Basic restorative work

Question 12: Which of the following will **NOT** require specialist services in the middle stages of dementia?

- A:** Treatment under sedation when co-operation becomes impaired
- B:** A check-up appointment
- C:** Treatment under general anaesthesia when co-operation becomes impaired

Question 13: Carers may be given specific training in how to support oral hygiene through

- A:** Introduction of high-fluoride toothpastes
- B:** A six-monthly application of a fluoride varnish
- C:** The use of electric toothbrushes
- D:** Personalised dietary advice

Question 14: In the advanced stages of the disease, the goal of the dental practitioner is to do all the following, except

- A:** To diagnose
- B:** To manage dental pain
- C:** To continue with restorative work
- D:** To support the maintenance of oral hygiene

Question 15: Is it correct that even in the absence of symptoms, all conditions should be treated?

- A:** YES
- B:** NO

THE END



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ANSWER SHEET

B8(26)

Top tips for management of patients with dementia in primary care

*Time spent on activity						hour		min				
	A	B	C	D	E		A	B	C	D	E	
1						8						
2						9						
3						10						
4						11						
5						12						
6						13						
7						14						
						15						

How relevant was the content of this activity to your scope of practice?			
			
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