University of Plymouth

PEARL https://pearl.plymouth.ac.uk

Faculty of Health: Medicine, Dentistry and Human Sciences Peninsula Dental School

2023-07-14

Developing a person-centred approach in dentistry beyond NHS recall intervals: a commentary

MILLS, IAN

https://pearl.plymouth.ac.uk/handle/10026.1/21160

10.1038/s41415-023-6009-0
British Dental Journal
Springer Science and Business Media LLC

All content in PEARL is protected by copyright law. Author manuscripts are made available in accordance with publisher policies. Please cite only the published version using the details provided on the item record or document. In the absence of an open licence (e.g. Creative Commons), permissions for further reuse of content should be sought from the publisher or author.

Developing a person-centred approach in dentistry beyond NHS recall intervals: a commentary.

Mills, I., Scambler, S., Neville, P., Asimakopoulou, K.,

31st January 2023

Key Points

- Person-centred care (PCC) is recognised as fundamental dimension of quality within healthcare. Models of PCC have primarily been developed from medicine, with little consideration of how they may, or may not, translate across to dentistry.
- Shared decision making (SDM) is an important feature of person-centred care and is highly relevant within many aspects of dentistry, including adoption of tailored recall intervals.
- The development of educational and training materials for shared decision making in dentistry are to be welcomed, but any content must be relevant to dentistry and seek to promote a person-centred approach, rather than simply be used as a tool to increase NHS access.

Abstract

Person-centred care (PCC) is acknowledged as a fundamental dimension of quality within healthcare and provides significant benefits for patients and clinicians. Models of PCC have primarily been developed from the medical literature, with limited consideration of their application within dentistry. The Personalised Care Institute (PCI) was established to deliver education and training on PCC and is working with the Office of the Chief Dental Officer for England to develop resources on Shared Decision Making (SDM) to promote tailored recall intervals.

This paper seeks to promote the value of PCC and SDM in delivering high quality care, but cautions against the use of generic models or training in view of the potential differences which may exist within dentistry, particularly general dental practice. The authors highlight the need to develop materials and training which are appropriate,

contextualised and relevant to dentistry. The capacity and desire to deliver PCC is strongly influenced by the healthcare system which is in operation. The current UDA system operating in England would appear to act as a barrier to the delivery of PCC. Unless significant and rapid changes are introduced to the NHS Contract, UDA targets will continue to take precedence over person-centred care, shared-decision making and tailored recall intervals.

(203 words)

Developing a person-centred approach in dentistry beyond NHS recall intervals: a commentary.

The past twenty years has witnessed an exponential growth in research into person centred care (PCC), which has led to increasing interest in how this relates to dentistry[1-6]. There is little consensus on a shared definition of PCC, however there is broad agreement on the principles and values that underpin it. PCC has also entered the policy and political realms, as evidenced by its inclusion in the UK's NHS constitution. However, as PCC has become popularised and politicised as a metric for quality, there is little agreement on how to best operationalise it in a clinical setting. This contradiction can be attributed in part to a failure by both PCC scholars and politicians alike to acknowledge the complexity of healthcare delivery. One must also consider that healthcare is delivered across a wide variety of clinical settings (e.g. medical, dental, allied health), to a demographically diverse patient population with a variety of health (chronic or acute) and treatment (curative or preventative) needs [7, 8]. As a result, what PCC means will differ depending on the health care context and patient populations, and healthcare's tendency to adhere to an homogeneous definition and model of PCC is counterproductive.

The Office of the Chief Dental Officer for England (OCDOE) has recently announced the Personalised Care Institute (PCI) has been asked to develop material on Shared Decision Making (SDM) to support dental personnel and patients as part of the dental contract reforms in England[9]. On the surface, this would appear to be a significant step forward in promoting a person-centred approach within dentistry, although at this stage the focus seems to be solely on implementation of NICE guidelines for recall intervals[10].

This article highlights the importance of person-centredness in providing oral health care, but endorses the view that PCC requires a contextualised approach[8]. Training materials need to reflect the unique characteristics of dentistry and the authors would caution against relying on established PCC models developed in medicine, which do not necessarily translate to dentistry[9, 109, 10910] .

This paper aims to provide a brief overview of Person-Centred Care (PCC), detail how the concept has been developed and refined within medicine and dentistry, and suggest how dentistry may need to be approached differently when developing training and educational material. To this end we begin with an outline of how dentistry is different from medicine, and why the existing model of PCC, as understood in medicine, is not appropriate for dentistry.

The Dental Context

Assessment of quality has become an increasingly important focus within UK health care and forms a central feature of performance management and quality improvement. However, within NHS dentistry in England, the primary focus continues to be on the delivery of Units of Dental Activity (UDAs) as the key performance indicator.

"Person-centredness" is viewed as an important component when measuring quality within health care[11] and is recognised as one of the key dimensions of quality according to the Institute of Medicine[12], the Health Foundation[13], Royal College of General Practitioners[14] and the NHS[15]. Darzi described quality in the NHS, in terms of clinical effectiveness, safety and patient experience[16]. Patient experience was subsequently defined within the NHS Patient Experience Framework[17] and aligned closely with the Picker Principles of Patient-Centred Care[18].

Improving access to NHS dentistry continues to be the central focus for commissioners and patients, and this has been identified as one of the key aims of the dental system changes. The gravity of the access situation was highlighted by Healthwatch in 2021[19] and reinforced by data obtained by the BBC, which reported that 90% of practices were no longer accepting new adult patients[20].

In response to this crisis, NHS England have promoted the importance of adhering to personalised recall intervals as a means of increasing access, and aim to improve compliance by more effective monitoring of practices[9]. The drive for "cultural change"[9] within NHS dentistry will be supported by materials and training developed by the Personalised Care Institute (PCI) as part of Dental Systems Reform (DSR) [9].

Shared Decision Making

It is no longer appropriate or acceptable for doctors or dentists to make decisions about a patient's care without the full involvement and participation of the patient. Shared decision making (SDM) is a term frequently used to describe this process of participation[21], with a significant number of academics proposing that SDM should be seen as "the pinnacle of patient-centred care"[22, 23]. This view has also been expressed within the dental literature where a hierarchical model of PCC has been developed based on information and choice[4].

Shared-decision making (SDM) has been recognised as an important element of person-centred care and a gradual shift has been evident within many areas of dentistry as we move away from a paternalistic model of care. This has been widely acknowledged within many dental schools where SDM is embedded within the undergraduate curriculum[24, 25] and the importance of PCC seen as core to all patient interactions. However, a recent study by Hayer and Wassif reported that there was a

degree of confusion around the concept of SDM amongst general dental practitioners and that current guidelines and standards were considered to lack clarity[26].

Shared decision-making is defined by NICE as “a collaborative process that involves a person and their healthcare professional working together to reach a joint decision about their care”[27]. The NICE guidelines are explicit in the need for a person to understand “the risks, benefits and possible consequences of different options through discussion and information sharing”[27]. SDM can be considered an important aspect of the consent process although SDM should not simply be considered as informed consent [28].

It is important to acknowledge and understand that the desire of the patient to participate in the decision-making process can vary considerably, with some patients more eager to engage than others. Patient participation must be recognised as a fluid process where the level of involvement may vary according to a number of factors[29], including; the nature of the condition, personal characteristics of the patient and the dentist-patient relationship[30]. A patient’s reluctance to engage can present challenges for the clinician in terms of following NICE guidelines on SDM[4], and this can also pose a potential issue in terms of consent.

Various tools have been developed and advocated to support SDM in clinical practice[31] and the benefits of decision-making aids within dentistry have been highlighted [26]. Such tools can encourage patient participation, promote information sharing, improve patient satisfaction and ensure better informed decisions are made by patients and clinicians[31]. A notable example includes development of the Antibiotic Stewardship Tool for clinical decision making in the urgent dental care

setting[32], which was co-designed to ensure appropriate clinical decisions were made in partnership between patient and dentist.

Self-management is an important element of PCC and SDM, and an excellent example of this in dentistry is the treatment of chronic orofacial pain including temporomandibular joint disorder [33]. The oro-facial pain self-management guide developed by the University of Leeds has been proved to be highly effective and is based on a person-centred approach with close collaboration between the patient and the clinician[28, 32].

At this stage, the focus of the PCI / NHS England collaboration appears to relate solely to recall intervals, but adoption of a person-centred approach, including SDM, can offer many wide-ranging benefits for both the patient and the clinician[2, 4, 34-37] and this must be embraced.

Person-centred care in dentistry

In general medical practice, various studies have explored what patients most value in a family doctor, and the findings seem to be fairly consistent - health promotion, partnership and communication[25], where "a doctor listens and does not hurry me"[26], procedures were explained clearly [36] and patients felt cared for and attended to [37].

Chapple et al [38] undertook a small exploratory study to investigate dental patients' preferred role in treatment decision-making. The results revealed that dental patients had distinct preferences towards the style of decision making, whether it be active, collaborative or passive based on various factors including time constraints, confidence in dentist, knowledge and trust. The study revealed that although patients preferred a collaborative role, a passive role was more commonly identified, which is consistent with the traditional paternalistic approach.

Until fairly recently, there was a paucity of research into PCC within dentistry, which contrasts starkly with other areas of medicine and health care. This is more likely to reflect the relative recency of the dental literature rather than a view that PCC is any less relevant in dentistry than it is in the rest of healthcare. There is little doubt that a person-centred approach within dentistry is likely to deliver similar benefits for patients to that which are experienced within medicine. This has been supported by work published by Bedos et al [39] who state that "patient-centred clinical approaches may help dentists interact with their patients, especially those with different social or cultural backgrounds". This approach can also improve patients' adherence to treatments and help to improve health-related behaviours such as oral hygiene and nutrition." [39] As highlighted by Bedos[39], a person-centred approach can be particularly impactful when providing care for vulnerable patients. An example of promoting PCC within vulnerable groups is the "Right to Smile Consensus Statement" which has been developed to address oral health inequalities in patients with severe mental health conditions[40].

Personalised Care Institute

In September 2020, NHS England established the Personalised Care Institute (PCI)[41] to help staff involved in people's health and care develop the knowledge and skills to support the implementation of the NHS Long Term Plan[15] and the "Comprehensive Model for Personalised Care"[42].

The key aims of the Institute are detailed as follows:

- set quality standards for training, focussing on 4 of the 6 components of the comprehensive model for personalised care[43]

- support the development of training programmes for the current workforce in order to help them to deliver personalised care to those quality standards
- support the development of training programmes for the new roles identified within primary care networks as part of the NHS Long Term Plan
- ensure that personalised care is represented in relevant undergraduate and post-graduate curricula.

The PCI model of Personalised Care is based on six components, which are included in Table 1[42]. The aim of the institution is to provide training for 75,000 health and care professionals by 2024, including members of the dental profession. The PCI steering group currently comprises more than 40 representatives from colleges, medical institutions, and healthcare membership associations.

The importance of a person-centred approach has been widely promoted within dentistry [2, 4, 6, 39, 44, 45] and the collaboration between the PCI and the Office of the Chief Dental Officer for England should be welcomed. It is hoped that the influence of this relationship will not be limited to simply communicating recall intervals, and will place PCC at the centre of DSR and mark a long overdue shift away from UDA-centred care.

The PCI has been invited to develop educational and training materials to promote SDM with the aim of improving adherence to NICE recall intervals. This may be seen as a laudable ambition, but the challenge will be to ensure the material is relevant to dentistry, is considered of educational value, and is seen to bring benefits to the patient, the staff and the practice. Aligning these goals will be key, and it is important

that clinical academics and members of the primary care dental team are directly involved in the development of the content.

Table 1 – PCI Components of PCC

PCI Components of PCC
Shared decision making
Supported self-management
Personalised care and support planning
Social prescribing
Patient choice
Personal health budgets

Why person-centred care is different in dentistry.

A comparison of the various models of PCC indicates that many of the descriptions and domains are likely to be highly relevant to caring for patients in general dental practice. However, it is the authors' contention that to simply transfer the PCI model to dentistry without challenge would be ill-advised and inappropriate. Original models of PCC were based predominantly on studies of patients in secondary care. Where PCC models were developed from primary care, the majority related to general medical practice, and did not seek to understand the views of dental patients.

There are currently six models of PCC in dentistry [46,45, 47-50]. Two of these were developed based on patients' perspectives or have incorporated patients' views in addition to dentists'.[48, 50] and the understanding of the patient dimension including their social context and how they experience health and disease is present in all the models. However, shared decision-making, was highlighted in most models [45, 46, 49, 50] but not in all of them. The importance and effect of the wider context of health care on PCC was also acknowledged in two of these six models [51, 50]. In general, the PCC models in dentistry seem to stress the importance of providing humane care to the patients and making a connection with them.

General dentistry has much in common with other aspects of healthcare in terms of supporting patients to achieve improved health. There are, however, a number of important differences with respect to general dentistry when compared to hospital medicine, or indeed general medical practice, which are worth highlighting.

- **Generalist**

  The vast majority of dentistry in the UK is delivered by general dental practitioners who provide care to all age groups; potentially treat all oral conditions; manage acute and chronic conditions; and act as the diagnostician, the radiologist, the physician, the surgeon and the counsellor[52-56]. This is in stark contrast to the work of specialists, General Medical Practitioners (GMPs), or healthcare professionals working in secondary or tertiary care. The relationship which exists between patient and dentist often reflects this, and can be very different to that which exists between patients and other health care professionals[57].

- **Complexity of care**

Most dentistry undertaken within general practice is "routine", elective and straightforward in terms of complexity, risk and impact on quality of life. This can contrast with admission to hospital or to long-term care with a GP.

- **Preventative approach to care**

  General dentistry is focussed on prevention of oral disease, primarily caries, periodontitis, erosive tooth wear and oral cancer. This has been highly effective and has contributed to significant improvements in the oral health of the population within the UK. Many patients embrace the screening process of the "routine dental check-up" and attend regularly for assessment despite the lack of symptoms. This approach to oral health is different to that of general health and can foster a different attitude towards, and relationship with, the dental healthcare provider.

- **Active care**

  Alongside prevention, treatment is a routine part of dental appointments. This means that within a consultation, dentists may have to take a history, make and explain a diagnosis, outline the different treatment options, obtain consent and carry out the agreed treatment. This is compounded by the fact that, for at least part of the consultation, the patient will be unable to speak while examinations and treatment are carried out. All of these factors, we suggest, require a different approach to, and understanding of communication and shared decision making within the dental context.

- **Relationship**

  Primary care dentistry is still based on the premise of delivering continuity of care with one clinician taking responsibility for long-term care. This has gradually been undermined by a number of factors but continues to exist for

many patients which is in stark contrast to many other aspects of health care[58, 59].

- **Business and consumerism**

  The majority of dental practices are privately owned businesses and operate within a free market in direct competition with other providers. This has resulted in an increasingly consumerist approach to oral health care which is much less developed in other health sectors.

- **Beauty**

  Treatments involving tooth whitening, non-surgical facial aesthetics, orthodontics, veneers and tooth-coloured fillings have increased significantly in recent years. This has been driven by the demands of image conscious patients who place value on an aesthetically pleasing smile, but it has undoubtedly been encouraged by the profession through marketing and advertising which is rarely seen in other areas of health.

- **Money**

  "Care free at the point of delivery" is only relevant for a limited group of the population, which is in direct contrast to most other areas of medical care in the UK. Paying for treatment has a profound influence on the attitudes and expectations of patients by introducing a transactional element which can impact on the relationship.

Dentistry, particularly that which is delivered in general practice, is profoundly different to many other aspects of health care. It would therefore be inappropriate to assume that models of PCC designed for geriatric medicine, secondary care or general medical practice could simply be generalised to dentistry. There are many aspects of existing models of PCC which relate to dentistry, but it is likely that differences exist in

both *content* (i.e. it differs in the underlying dimensions of the approach) or *emphasis* (the underlying approach is the same, but there is a different emphasis on the different elements).

Mills et al[60] undertook a comparison of a dental model of PCC against that of Picker, and reported that although there were a significant number of similarities, there were distinct and nuanced differences[61]. The situation is likely to be similar with regard to the PCI Model, and certain components are likely to have greater relevance within dentistry, than others. It is important that these are identified, acknowledged and accommodated as part of the programme development. Training and materials need to be context specific and failure to align the components of personalised care with practice-based examples will undermine the aims and objectives of the initiative.

Concluding remarks

NHS dentistry is facing considerable challenges, and the delays in dental contract reform in England have placed intolerable pressure on general dental practices, their patients and the wider public. The 2006 NHS Contract introduced a target-focussed approach to dentistry based on delivery of UDAs. This continues to be the primary concern for commissioners and dentists, with both groups interminably focussed on the delivery of UDA targets, often to the detriment of patient care [62, 63]. Such an approach and philosophy undermine the delivery of person-centred care, and risks patients being viewed as a source of UDAs rather than as individuals with specific needs.

While the motivation for this paper was stimulated by the OCDOE announcement on dental reform in England, the message pertaining to PCC and dentistry is widely applicable, irrespective of the country or healthcare setting. Should DSR finally be

delivered, additional bespoke training and support around communication, PCC and SDM will undoubtedly be useful. However, it must be tailored for dentistry and reflect the nuanced differences which exist within the provision of oral health services. Training must also reflect our aspirations to embrace skill mix within NHS Dentistry, with materials relevant and accessible for the whole dental team.

A move to embed person-centred care and shared decision-making into future dental contract reforms is to be greatly welcomed. However, there is little prospect of this being achieved as long as UDA-centred care continues to be used as a key performance indicator, with clinicians encouraged to chase spurious targets rather than deliver truly personalised care.

The essence of person-centred care is communication, and this includes active listening on the part of both the dental professional and the patient. Such interactions take time, especially if informed or shared decision making is the objective. The importance of time needs to be respected, valued and acknowledged by commissioners. No abundance of informative resources or personalised care training will effect change, if the dental team are not afforded the time to spend with patients.

Declaration of interests

The authors declare no conflicts of interest.

Author affiliations

Ian Mills – Peninsula Dental School, University of Plymouth, UK.

Patricia Neville - Bristol Dental School, University of Bristol, UK.

Koula Asimakopoulou, Sasha Scambler – Faculty of Dentistry, Oral and Craniofacial Sciences, King's College London, UK.

Author contribution

Ian Mills prepared the initial manuscript and all four authors commented on and edited revised versions before submitting for publication.

REFERENCES

1. Apelian N, Vergnes J-N, Bedos C. Person-Centred Dentistry: When Do We Start? International Journal of Whole Person Care. 2014;1(1).http://ijwpc.mcgill.ca/article/view/71
2. Mills IJ. A person-centred Approach to holistic Assessment. Prim Dent J. 2017 Aug 31;6(3):18-23.
3. The contribution of research and education to patient-centred primary care. Family Practice Supplement. Abstracts of the 35th Annual Scientific Meeting of the Society for Academic Primary Care. July 12-14, 2006. Keele, United Kingdom. Fam Pract. 2006 Sep;23 Suppl 1:1-142.http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=18592620
4. Scambler S, Asimakopoulou K. A model of patient-centred care–turning good care into patient-centred care. British Dental Journal. 2014;217(5):225-8.
5. Scambler S, Delgado M, Asimakopoulou K. Defining patient-centred care in dentistry? A systematic review of the dental literature. British Dental Journal. 2016;221(8):477-84.
6. Mills I, Frost J, Moles DR, Kay E. Patient-centred care in general dental practice: sound sense or soundbite? British Dental Journal. 2013;215(2):81-5.http://search.ebscohost.com/login.aspx?direct=true&AuthType=athens,cookie,ip,url,uid&db=cmedm&AN=23887534&site=ehost-live
7. Cribb A. Involvement, shared decision-making and medicines. 2011.
8. Gardner J. Patient-centred medicine and the broad clinical gaze: Measuring outcomes in paediatric deep brain stimulation. BioSocieties. 2017;12(2):239-56.
9. NHS England. Your NHS dentistry and oral health update In: Services PCD, editor. London: NHS England; 2022 https://dentistryandoralhealthupdate.cmail19.com/t/ViewEmail/d/EE73D3276DA08DF32540EF23F30FEDED/D3D2B550D9F513A51D419C9787CC9684?alternativeLink=False
10. Excellence. NIfHaC. Dental Recall: Recall Interval Between Routine Dental Examinations.: National Institute for Health and Care Excellence.2004.Available at https://www.nice.org.uk/guidance/cg19/resources/dental-recall-recall-interval-between-routine-dental-examinations-pdf-250576826821
11. Institute of Medicine. Crossing the Quality Chasm: A new health system for the 21st century. 2001.http://www.iom.edu/~/media/Files/Report%20Files/2001/Crossing-the-Quality-Chasm/Quality%20Chasm%202001%20%20report%20brief.pdf
12. Medicine Io. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC: Institute of Medicine2001 2001.http://iom.edu/~/media/Files/Report%20Files/2001/Crossing-the-Quality-Chasm/Quality%20Chasm%202001%20%20report%20brief.pdf
13. Collins A. Measuring what really matters: Towards a coherent measurement system to support person-centred care. London: The Health Foundation. 2014.
14. Royal College of General Practitioners. Patient Centred Care in the 21st Century. London: RCGP: November 2014.
http://www.rcgp.org.uk/policy/rcgp-policy-areas/inquiry-into-patient-centred-care-in-the-21st-century.aspx.http://www.rcgp.org.uk/policy/rcgp-policy-areas/inquiry-into-patient-centred-care-in-the-21st-century.aspx
15. NHS. The NHS long term plan.2019. https://www.longtermplan.nhs.uk/

16. Professor the Lord Darzi of Denham K. High Quality Care For All. NHS Next Stage Review Final Report. London2008.
17. Department of Health. NHS Patient Experience Framework. London: HMSO; 2012; Available from: http://www.dh.gov.uk/health/2012/02/patient-experience-framework/.http://www.dh.gov.uk/health/2012/02/patient-experience-framework/
18. Picker. Eight Picker Principles of Patient-Centered Care. 2011; Available from: http://pickerinstitute.org/about/picker-principles/.http://pickerinstitute.org/about/picker-principles/
19. Healthwatch England. What people have told us about NHS dentistry: A review of our evidence – April to September 2021 Healthwatch website2021.https://www.healthwatch.co.uk/sites/healthwatch.co.uk/files/reports-library/20211014_HWE%20Dentistry%20Update%20Dec%202021.pdf
20. BBC News. Full extent of NHS dentistry shortage revealed by far-reaching BBC research 2022 https://www.bbc.co.uk/news/health-62253893
21. Weston WW. Informed and shared decision-making: the crux of patient-centered care. CMAJ. 2001 Aug 21;165(4):438-9.http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=11531054
22. Barry MJ, Edgman-Levitan S. Shared decision making—the pinnacle of patient-centered care. New England Journal of Medicine. 2012;366(9):780-1.
23. Asimakopoulou K, Scambler S. The role of information and choice in patient-centred care in diabetes: a hierarchy of patient-centredness. European Diabetes Nursing. 2013;10(2):58-62.http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url,shib&db=rzh&AN=2012183038&site=ehost-live
24. Asimakopoulou K, Mills I, Neville P, Scambler S. COVID-19 presents an opportunity for dental teams to become ready for person-centred care. British Dental Journal. 2021 2021/12/01;231(11):709-12.https://doi.org/10.1038/s41415-021-3715-3
25. Neville P. What matters to you? British Dental Journal. 2020 2020/12/01;229(12):760-.https://doi.org/10.1038/s41415-020-2515-5
26. Hayer N, Wassif HS. General dental practitioners' perceptions of shared decision making: a qualitative study. British Dental Journal. 2022;232(4):227-31.
27. National Institute for Health and Care Excellence. Shared Decision Making. NICE guideline [NG197]. 2021.https://www.nice.org.uk/guidance/ng197
28. Barber S. Shared decision-making in orthodontics: Are we there yet? Journal of orthodontics. 2019;46(1_suppl):21-5.
29. Thompson AGH. The meaning of patient involvement and participation in health care consultations: a taxonomy. Social Science & Medicine. 2007;64(6):1297-310 14p.http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url,shib&db=rzh&AN=106158153&site=ehost-live
30. Collins S, Britten N, Ruusuvuori J. Patient Participation In Health Care Consultations: Qualitative Perspectives: Qualitative Perspectives: McGraw-Hill Education (UK); 2007.
31. Stacey D, Légaré F, Lewis K, Barry MJ, Bennett CL, Eden KB, et al. Decision aids for people facing health treatment or screening decisions. Cochrane database of systematic reviews. 2017(4).
32. Thompson W, Sandoe J, Pavitt S, Walsh T, Byrne-Davis L. Co-Developing an Antibiotic Stewardship Tool for Dentistry: Shared Decision-Making for Adults with

Toothache or Infection. Antibiotics 2021, 10, 1345. s Note: MDPI stays neutral with regard to jurisdictional claims in published …; 2021.
33. Aggarwal VR, Wu J, Fox F, Howdon D, Guthrie E, Mighell A. Implementation of biopsychosocial supported self-management for chronic primary oro-facial pain including temporomandibular disorders: A theory, person and evidence-based approach. Journal of Oral Rehabilitation. 2021;48(10):1118-28.
34. Mills I. Through the patient's eyes–the importance of person-centred care in oral cancer. British Dental Journal. 2018;225(9):889-91.
35. Stewart M, Brown JB, Donner A, McWhinney IR, Oates J, Weston WW, et al. The impact of patient-centered care on outcomes. J Fam Pract. 2000 Sep;49(9):796-804.http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=11032203
36. Bertakis KD, Azari R. Patient-Centered Care is Associated with Decreased Health Care Utilization. J Am Board Fam Med. 2011 May-Jun;24(3):229-39.http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=21551394
37. Irwin RS, Richardson ND. Patient-focused care: using the right tools. Chest. 2006;130(1 Suppl):73S-82S.http://search.ebscohost.com/login.aspx?direct=true&db=cmedm&AN=16840370&site=ehost-live
38. Chapple H, Shah S, Caress AL, Kay EJ. Exploring dental patients' preferred roles in treatment decision-making - a novel approach. British Dental Journal. 2003;194(6):321-7.http://search.ebscohost.com/login.aspx?direct=true&db=cmedm&AN=12682659&site=ehost-live
39. Bedos C, Loignon C. Patient-centred approaches: new models for new challenges. Journal of the Canadian Dental Association. 2011;77:b88-b.http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=2011264620&site=ehost-live
40. Closing the Gap Network. The Right to Smile; an Oral Health Consensus Statement for People
experiencing Severe Mental Ill Health.
2022.https://www.lancaster.ac.uk/media/lancaster-university/content-assets/documents/fhm/spectrum/Oral_Health_Consensus_Statement.pdf
41. Personalised Care Institute. Personalised Care. 2022; Available from: https://www.personalisedcareinstitute.org.uk/.https://www.personalisedcareinstitute.org.uk/
42. Personalised Care Institute. What is personalised care? 2022 Available from: https://www.personalisedcareinstitute.org.uk/what-is-personalised-care-2/.https://www.personalisedcareinstitute.org.uk/what-is-personalised-care-2/
43. NHS England. Comprehensive model of personalised care. In: Department of Health & Social Care, editor.2022.https://www.england.nhs.uk/personalisedcare/comprehensive-model-of-personalised-care/
44. Asimakopoulou K, Gupta A, Scambler S. Patient-centred care: barriers and opportunities in the dental surgery. Community Dentistry And Oral Epidemiology. 2014.
45. Loignon C, Allison P, Landry A, Richard L, Brodeur JM, Bedos C. Providing humanistic care: dentists' experiences in deprived areas. Journal of Dental Research.

2010;89(9):991-5.http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=2010753300&site=ehost-live
Publisher URL: www.cinahl.com/cgi-bin/refsvc?jid=2778&accno=2010753300
46. Fuertes JN, Mislowack A, Bennett J, Paul L, Gilbert TC, Fontan G, et al. The physician–patient working alliance. Patient education and counseling. 2007;66(1):29-36.
47. Rathert C, Wyrwich MD, Boren SA. Patient-centered care and outcomes: a systematic review of the literature. Medical Care Research and Review. 2013;70(4):351-79.
48. Kulich KR, Berggren U, Hallberg LR. A qualitative analysis of patient-centered dentistry in consultations with dental phobic patients. J Health Commun. 2003 Mar-Apr;8(2):171-87.http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=12746040
49. Apelian N, Vergnes J-N, Bedos C. Humanizing Clinical Dentistry Through A Person-Centred Model. International Journal of Whole Person Care. 2014;1(2):30-50.
50. Lee H, Chalmers NI, Brow A, Boynes S, Monopoli M, Doherty M, et al. Person-centered care model in dentistry. BMC Oral Health. 2018;18(1):1-7.
51. Mills I, Frost J, Cooper C, Moles DR, Kay E. Patient-centred care in general dental practice--a systematic review of the literature. BMC Oral Health. 2014;14(64):64.
52. Rattan R, Waite I. Vocational training in general dental practice: the handbook for trainers: CRC Press; 2017.
53. Rattan R, Wakley G, Chambers R. Clinical governance in general dental practice: CRC Press; 2017.
54. Rattan R, Wilson NH, Tiernan J. Risk management in general dental practice: Quintessence; 2004.
55. D'Cruz L. Clinical governance: something new for general dental practice? Dent Update. 2002 Jan-Feb;29(1):34-7.
56. D'Cruz L, Mills S, Holmes D. Legal aspects of general dental practice: Elsevier Health Sciences; 2006.
57. Rattan R, Wilson NH. Quality Matters: From clinical care to customer service: Quintessence; 2007.
58. Jeffers H, Baker M. Continuity of care: still important in modern-day general practice. British Journal of General Practice; 2016.
59. Tammes P, Salisbury C. Continuity of primary care matters and should be protected. BMJ: British Medical Journal (Online). 2017;356.
60. Mills I, Frost J, Kay E, Moles D. Person-centred care in dentistry-the patients' perspective. British Dental Journal. 2015;218(7):407-13.
61. Mills I. The Delivery of Person-Centred Care in General Dental Practice. British Library: Peninsula College of Medicine and Dentistry (PCMD) 2018.https://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.758419
62. The House of Commons Health Select Committee. Report on dental services. Fifth Report of Session 2007 - 2008. London: The Stationary Office; 2008.http://www.publications.parliament.uk/pa/cm200708/cmselect/cmhealth/289/289i.pdf
63. Milsom KM, Threlfall A, Pine K, Tickle M, Blinkhorn AS, Kearney-Mitchell P. The introduction of the new dental contract in England – a baseline qualitative assessment. British Dental Journal. [Article]. 2008;204(2):59-

62.http://search.ebscohost.com/login.aspx?direct=true&db=ddh&AN=28611411&site=ehost-live