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Making the implicit explicit: Leadership in primary care dental practice

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ABSTRACT

Objectives: This paper reports on research aimed at understanding leadership activities in primary care dental practice, an under-explored area within the extant literature.
Methods: The research employed a qualitative, exploratory paradigm, using Video Reflexive Ethnography (VRE) and Activity Theory (AT) to capture the lived experiences of seven participating dentists.
Results: The research outlines the ways in which dentists demonstrate leadership skills in their daily work, identifying three interacting activity systems that define leadership in this setting: Patient Care (PC), Running the Surgery (RS), and Running the Practice (RP). Findings emphasise that leadership is directly related to patient care and is informed by explicit and implicit 'rules' governing these activities, which are often learnt and developed tacitly over the course of a dentist's career.
Conclusions: Leadership is based on relationships and emotional intelligence and effects dentists' general well-being in addition to the effective delivery of clinical care.
Clinical Significance: Unconscious, implicit and often automatic behaviours, skills and activities related to leadership and teamwork have been uncovered and linked directly to patient care. Findings and conclusions can enhance patient outcomes and experience alongside clinician wellbeing; and underpin effective surgery and practice management. Relevant in the clinical patient care context for every clinician.

1. Introduction

Leadership is often described as a major influence on patient safety, quality of care and the shaping of healthcare culture within society [1–3]. Reviews such as the Francis and Darzi reports [4,5] identify the need for better leadership across healthcare to prevent reoccurrence of tragedies and avoidance of patient harm that may result from the misuse of systems. Regulatory and governance guidance across health professions embeds 'leadership' into education, training, regulatory standards and guidance documents, including in dentistry and medicine [5–10]. However, there remains considerable debate over what good leadership 'looks like' and how it can be identified and promoted.

Leadership is often viewed generically across healthcare provision, from a secondary care hospital perspective, and at a political rather than clinical patient-facing level of activity (see Fig. 1). Much of the literature does not distinguish between specific healthcare contexts and conflates dentistry with medicine, nursing, and other allied healthcare professions. Aside from other differences between these various contexts, the work of a Primary Care General Dental Practitioner (GDP) in an independently owned practice, charging for services at the point of delivery adds a complexity to the context that may not be as immediately relevant to some other healthcare professionals [11].

Despite the reports and regulatory standards on leadership across healthcare, there is no unity in definition, theoretical model, aim, style or concept of leadership on which to understand leadership for dentistry in general, any dentist generally or for a dentist in primary care practice specifically. A previous narrative review of the literature [12] demonstrated that the focus has shifted from leaders to leadership; however, multiple definitions, models and theories are still in use across dentistry as well as healthcare more widely – some of which rely on outdated ideas. The relevant focus of the literature review for this paper is the understanding that the contemporaneous view of leadership is a "*context dependant, dynamic, socially constructed reciprocal influence process… consisting of multiple moderating variables all of which demonstrate reciprocal influence on one another to impact its effectiveness*." [9,12] Leadership is seen to be as much about those who are responding (followership) as it is about those in leadership roles and highlights an urgent need for context-sensitive empirical data at an operational (patient care) level.

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Dental practice can be compared with other areas of healthcare across organisational and leadership levels as depicted in Fig. 1 [12]. This highlights that while certain aspects of dental leadership may align with those in other healthcare settings, there are significant differences at both strategic and operational levels that require exploration in the specific dental context.

In line with seminal work on leadership outside of healthcare [13], the methods used in this study were based firmly in the exploratory, constructivist, and interpretivist, qualitative paradigm. This approach enables the inductive generation of new knowledge [14,15] directly from the specific context, thus ensuring outcomes are applicable and relevant to the participants. Participants inhabit this lived reality day after day and their experiences are not accessible meaningfully to an observer or solely through analysis of decontextualised reported data. Opportunity to recognise meaning making from the dentist participants themselves was fundamental, generating the 'lived' as opposed to the 'intellectual' ideology [16] and experience of 'being a dentist' as well as acknowledging the history and development of 'cultural norms' within the dental practice community [17,18]. Such research methods are rare in dental settings but they allow both the context and the individual to be considered together, highlighting the "*multiplicity and interdependency of variables as a complex system*" to be uncovered [19,20].

Findings should be viewed as context sensitive yet potentially applicable to all dentists through theoretical generalisation and the trustworthiness of findings in the qualitative paradigm [21–23]. Generalisability in the qualitative paradigm is different to statistical generalisability in the quantitative paradigm where it is linked with external validity. In statistical generalisability a random sample is taken to represent an entire population and results from that sample are extrapolated to the wider population [24]. Generalisability in the qualitative research paradigm is often related to the 'transferability' element of trustworthiness [25–27]. Transferability was enhanced in this study in various ways including being set in an interpretative paradigm; the use of maximum variation sampling; thick description of the data; the use of deviant and divergent cases to deepen understanding and enable greater degrees of abstraction and conceptualisation; and the embedding of reflexivity [22–24,28].

These strategies enable insight into the detailed 'how', 'what' and 'why' of leadership [29] that is required to deliver the currently missing context sensitive empirical data.

1.1. Research questions and AIMS

This study sought to provide empirical data about leadership experiences in dental practice using evidence-based research methodologies and was approved via HRA processes (IRAS project ID 162,295; protocol number PSMD-D-162,295-SH-001) and via the Principal Investigator University's Faculty Ethics Committee (project code: 16/17–698). The overall aim of the research was to describe, interpret and explain the phenomenon of leadership in dentists working in Primary Care Dental Practice. The research question being "how do dentists working in primary care dental practice identify and demonstrate leadership skills and qualities in their day-to-day work?"

2. Methods

This study combined the use of Video Reflexive Ethnography (VRE) [15] and Activity Theory (AT) [17,19,30]. VRE was the primary method of data collection and AT was used as the lens through which data were analysed. VRE has been used previously to explore leadership in a healthcare setting outside of dentistry [31].

2.1. Data collection

Video recordings were made of the dentists' clinical working while attending to patients in their surgeries. To minimise the Hawthorne effect of participants acting differently when being observed [32] recording equipment was small and unobtrusive (Go Pro Hero 5 Black©), and the researcher was not present in the surgery while filming occurred.

Supplementary traditional ethnographic observations recorded via field notes of each dentist undergoing their routine, non-patient facing activities in the practice (meetings, informal and formal interactions with staff) provided additional data relating to leadership responsibilities (as employers, employees, team leaders, managers, and team members), documentation, physical space, interactions and other people.

The full video footage of each participant engaging in their clinical work was edited into a montage of 1–5 min excerpts lasting up to a maximum of one hour. Excerpts were chosen using purposive sampling techniques, including evidence of concepts of leadership derived from the literature review [12], and offering a variety of activities within the dentists' clinical working sessions. The final data collection activity was a video recorded session of the dentist watching back their film montage

Organisational level	Leadership level	Healthcare context	Dental Practice Context
Grand Strategic	Systems	NHS trust, (inter)national, political, ICB, CCG, DoH	LPN, NHS Trust, CCG, ICB, GDC, DoH, OCDO
Strategic	Organisation	Hospital	Dental Practice
Operational	Team/group/unit	Ward/team/department	Element or area of practice e.g. surgery, reception
Tactical	Dyadic (relational)	Immediate relationship between 2 colleagues	Immediate relationship between 2 colleagues
Individual	Individual	Individual member of staff	Individual member of staff

Fig. 1. Organisational and leadership levels and how they relate to the healthcare setting [12].

with the researcher exploiting the principles of VRE. Using the 'think aloud' method [33,34] participants were prompted to reflect on the events they were viewing and where, if, or how they felt these related to leadership.

2.2. Data analysis

Data were deconstructed using Activity Theory (AT) to understand the overarching objectives of leadership via identification of individual activity systems and their six individual components. Fig. 2 shows an Activity System with its integrated components.

Using AT in this way as the theoretical lens provided insight into the different elements of the leadership context. An Activity System exists when a Subject (e.g. dentist) engages in an activity to achieve an Outcome or Objective (e.g. patient care) through work on, or with, an Object (e.g. patient). The Subject-Object interaction is facilitated by the use of 'mediating artefacts' which become known as Tools when used for, or integrated into, the activity [35]. Tools can be items such as computer software and equipment, or cognitive strategies such as language. This tool mediated subject-object interaction occurs within a Community (e.g. dental practice or dental surgery). It follows accepted Rules that govern how people act (e.g. cross infection protocols, GDC standards) and includes the Division of Labour (relating to others who share in the activity or environment during the activity e.g. dental nurse, receptionist). Rules can develop as the result of social conditioning, historical or cultural influences, or due to explicit or implicit governance influences, e.g. laws relating to confidentiality do not permit conversations about appointments or detail of treatment with anyone but the patient without consent. The Division of Labour may include control, power or role influences, and relate to individuals with a shared or contradictory purpose to the activity, including dental nurse, receptionist, lab technician. Each of these areas is influenced by, and in turn influences the other. The fact that each aspect of the activity system has developed through history within the cultural and contextual landscape and setting, leads to this context being embedded in the activity [17,36]. A pictorial representation of an Activity System is shown in Fig. 2 below.

Data were read or viewed, re-read and re-viewed until theoretical saturation was reached with no additional activity systems being detected [37]. Preliminary findings were discussed with participants and other dentists as a member checking exercise, and explicit, ongoing reflexivity employed to ensure the findings were firmly located within the expertise about clinical practice with the practitioner participants and to enhance trustworthiness [38,39].

2.3. Recruitment and sampling

Purposive sampling was used to recruit seven dentists working in Primary Care Practice, covering a variety of demographics and in line with sample sizes in comparable qualitative studies [37,40]. Analysis and data collection occurred concurrently, to allow iterative, reflexive decisions to be made on existing and future participant recruitment. Early cross-case comparison highlighted that the areas of position in practice (associate vs principal) and type of practice (independently owned or run by corporate) would benefit from deeper exploration. Two additional comparative cases were therefore recruited to provide a more sufficient dataset to enhance insight and support abstraction, conceptualisation and theoretical saturation [37,41,42].

Demographics (as detailed in Table 1) were identified relating to professionally accepted distinctions as well as aligning with areas noted as relevant across the wider healthcare leadership literature. The spread of demographics across the sample increased the opportunity to learn from participants with dissimilar experiences and in varying contexts.

All patients and members of the practice involved with the research were provided with project information prior to recruitment and gave written consent on the day in line with the ethics protocol.

2.4. Reflexivity

The PI (lead author SH) is a primary care and academic dentist, known through professional networks to the participants, which afforded many advantages such as access to and understanding of the environment, the language used etc. This enabled SH to 'fit in' with the practice teams and not create unnecessary or additional distractions from the study process. Conscious and continuous reflexivity [43] enabled this positionality to be considered throughout all stages of the process, and its influence explored where necessary.

Additionally, the facilitated VRE sessions were improved due to the researcher understanding the activity being seen in the videos meaning the participants did not feel they had to explain themselves or any activity they were undertaking. Having studied and critiqued the leadership literature prior to the VRE sessions, the researcher was able to prompt and ask open questions of the participants to support their explanations of if, where or how they felt leadership may have been relevant in their activities. The researcher remained open and conscious of not putting words into participants' mouths, and in the final analysis was able to combine the dentists' understanding alongside theoretical and academic insights.

High levels of reflexivity through consciously heightened self-awareness and enhanced critical subjectivity were necessary, with

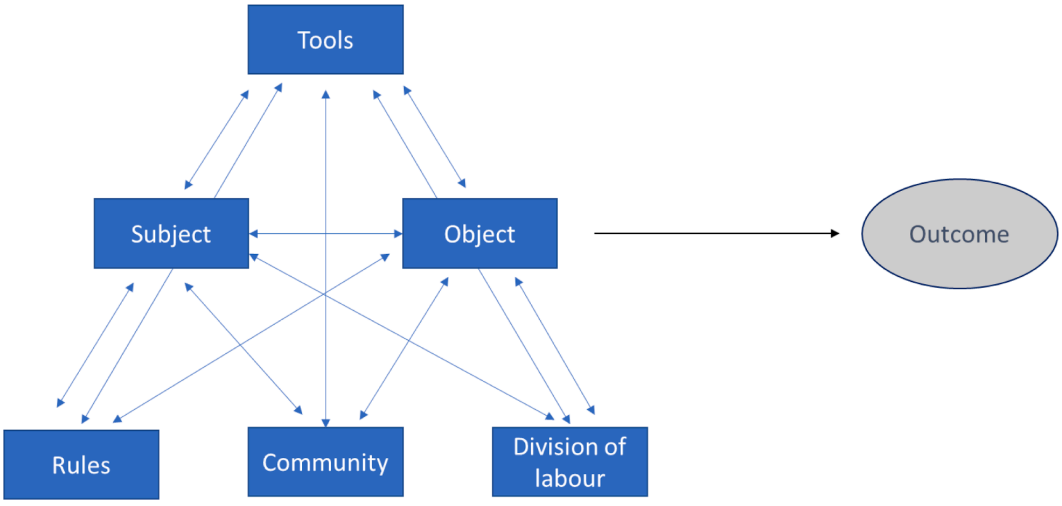

Fig. 2. Depicting the interacting components of an activity system.

Table 1
Dentist participant demographics.

	Gender	Time since qualification (years)	Time in practice (years)	Position in practice	Number of surgeries	Private, plan[1], NHS or mixed	Location (rural, suburban, city centre)	Part time PT or Full time FT	Previous practice experience	Nos patients seen while filming
D1	Male	15–20 years	8	Principal owner	3	Private & plan	Rural	FT	Associate (mixed)	5
D2	Female	2–5 years	3	Associate (corporate)	5	Mixed (all)	Suburban	PT	Dental Foundation Trainee & Associate (NHS)	7
D3	Female	10 - 15 years	6	Principal owner	7	Mixed (all)	City centre	PT	Associate (mixed)	7
D4	Female	2–5 years	1	Associate	4	Private & plan	Suburban	PT	Dental Foundation Trainee & Associate (NHS)	2
D5	Male	>30 years	2	Principal partner	4	Private & plan	Suburban	FT	Principal owner & associate (mixed)	5
D6	Male	2–5 years	2	Principal partner	4	Private & plan	Suburban	FT	Dental Foundation Trainee & Associate (NHS)	1
D7	Male	2–5 years	2	Associate	4	Private & plan	Suburban	PT	Dental Foundation Trainee & Associate (NHS)	3

[1] BUPA, Denplan, In house payment plans.

'critical subjectivity' defined as;

> "*a quality of awareness in which we do NOT suppress our primary experience; nor do we allow ourselves to be swept away and overwhelmed by it; rather we raise it to consciousness and USE IT as part of the inquiry process.*" [43]p94

3. Findings

3.1. Deconstructing leadership in dentistry

The daily leadership activities of all participants were seen to relate to three aspects of their work, identified by the outcomes of three discrete but interacting Activity Systems. These are depicted in Fig. 3 and described as:

1. patient care
2. running the surgery, and
3. running the practice

3.2. Activity system 1: patient care (PC)

The beginning and end of the 'patient care' system was taken to be when the patient sat down or got up from the dental chair. All participants shared the feeling of a deep focus on, and responsibility to, patients during this activity and demonstrated how relationships and behaviours were managed when a patient was 'in the chair'. The additional parts of the patient encounter; introduction, greeting, farewell and conclusion - elements of the patient being in the surgery but not sitting in the dental chair - shared characteristics from both the 'patient care' system and the 'running the surgery' system. The transition and intersection between the two distinct activity systems was demonstrated mainly in the focussed attention either being wholly on the patient or across a wider remit; and in the dentist-nurse communication. There was also a shift from the dentist being in absolute control and leading during the 'patient care' activity, to control and decision-making being more

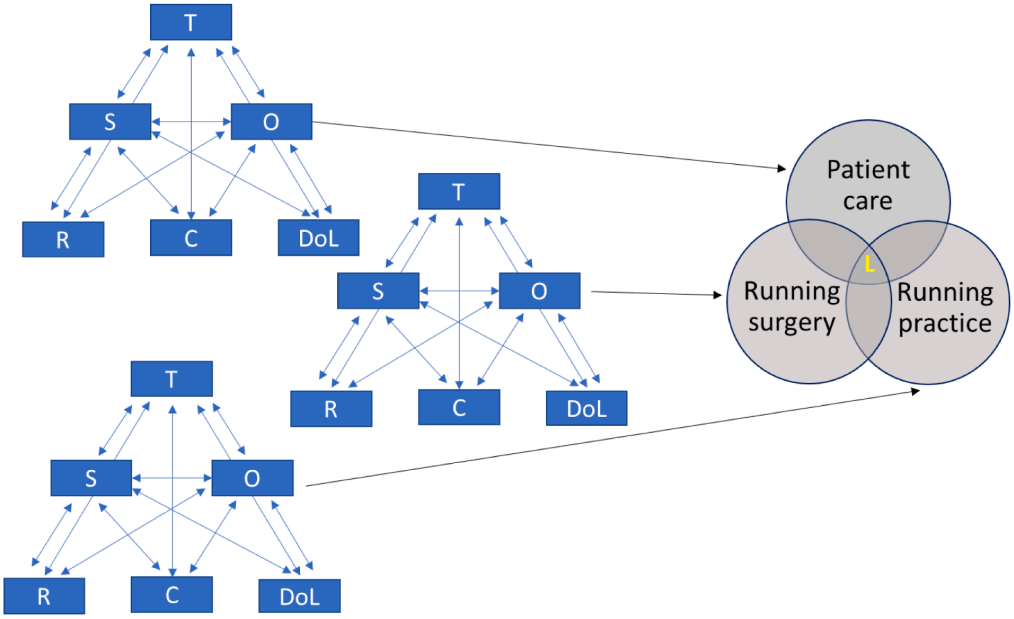

Fig. 3. Diagram of the three Activity Systems with interacting outcomes that integrate to define leadership.

shared and negotiated in the 'running the surgery' objective. This is demonstrated clearly in one participant quote:

> *"When a patient is being treated you use that time to focus on the patient, then between patients all the other stuff comes back into your head again…..you have to make sure all your patients feel that you are caring for them. They all deserve your undivided attention*" D5

3.3. Activity system 2: running the surgery (RS)

This Activity System is related to the dentist's planning, preparation, monitoring and management of the clinical environment of the dental surgery. This included consideration of the physical resources needed within the surgery and the set-up of the physical space, along with the actions of the nurse and other members of the team that impacted their surgery session in some way. The dentists all undertook preparation and ongoing monitoring and management activities relating to 'Running the Surgery' before, during and after the patient appointment. The communication between dentist and nurse demonstrated that although overall responsibility for the *patient* lay with the dentist, the dentist did not always assume the leadership role in this system. Rather, they were working in partnership with their nurse. The activity relied on negotiation and flexibility in outward communication by the dentist, as well as listening, compassion towards the nurse, and knowing when compromise was acceptable and required. Each dentist had their own personal way of working with their nurses to effectively run the surgery, but all worked in partnership with their nurses to achieve this.

The following quote exemplifies the shared leadership of this activity system.

> "*We're more equals. Patients pick up on hierarchy – 'why did you do that? Because I told you to', that doesn't really work anymore!…… The smoother you can make the dynamic between you and your nurse the easier it is, otherwise it makes the job just that little bit more awkward. You can see that I'm only really in control of the bracket table – the other 80 % of the space is [nurse's]! If you work together it's a lot easier…"* D1

3.4. Activity system 3: running the practice (RP)

This activity system centred on how participants' leadership actions related to the wider 'business' of the dental practice in which the surgery and patient care was situated, as well as relating to their own income generation. Finances impacted on and were influenced by multiple factors including the dentist's working hours; the patient base; their own patient lists (number and type of patient and available treatments); the physical properties of the surgery and practice; available materials and equipment; pricing structures; the fullness of the appointment books; support staff and the rest of the team; training opportunities; and ethos and 'feel' of the practice.

This activity was undertaken explicitly and consciously by those who owned practices (e.g. principal dentists) and quite often, consciously or unconsciously, ignored by those who did not (e.g. associates). All dentists recognised the impact of this activity on their individual work in some way although for associates it was more to do with personal finance and the 'busy-ness' of their appointment book, rather than explicit practice business requirements. Only principal dentists mentioned making money for the practice and associates did not explain or demonstrate any responsibility toward practice or surgery upkeep, maintenance, staffing or business aspects of their work. Specific differences were further emphasised between associates in independently run practices and associates within a Dental Body Corporate (DBC). This related mainly to loyalty and interpersonal relationships with, and feelings towards, those running the business.

All participants who were consciously and dynamically engaged in this activity system reported it being all encompassing and relentless with no breaks. They demonstrated completing or arranging a wide range of work or 'jobs' in addition to their clinical role of seeing and treating patients. Where one dentist worked as principal in the participating practice and as associate in another practice, they reported differing reactions and response to this activity system's objective.

> "*I still work as an associate in [different practice] and no, I don't feel as much responsibility for it at all. It's not my remit*". D5

> "*I bet this is very different from watching an associate in practice?…. I'm constantly balancing patient care with running the practice……It's total immersion in the practice – but it's your business, your practice… [name] says I work all the time; that I think of the practice all the time, but I think you have to."* D3

> "*I'm sitting on the back of a bucking bronco and just trying to hold on for dear life until I get to 6 o'clock*" D1

3.5. Rules identified from the activity systems

Within each of the three activity systems (patient care, running the surgery, running the practice), the individual system components were identified, including a number of rules listed in Table 2. Variation in how the rules were understood or enacted gave increased insight into the overall activities related to leadership.

Rules shape behaviour and may emerge from social conditioning, historical or cultural traditions, and/or explicit and implicit governance structures. However, many rules within dental practice are local, contextual, and often implicit or tacit. By identifying and articulating these rules - many of which are culturally or historically embedded in dental leadership practices - previously hidden mechanisms can be brought to light. Examples include the expectation that the dental nurse supports the dentist while the dentist focuses on the patient; that the nurse anticipates what is needed rather than waiting for direct instructions; and that no one takes breaks outside the pre-agreed 'lunch' period.

Participants frequently commented on the 'orderliness' of their activities which had previously been undertaken unconsciously. Making these implicit rules explicit helped to make sense of activities which might otherwise have appeared aimless or unnecessary, such as storing regularly used instruments in sealed bags within drawers, a practice that might seem cumbersome but is essential for maintaining cross-infection control. Exploring situations in which rules were not followed or adhered to provided deeper insight into the contextual factors which shape leadership in dental settings.

4. Discussion and conclusions

The understanding of leadership through defining the three discrete but interacting activity systems has been co-constructed with dentists thus employing a 'bottom up' approach [44], giving voice to the practitioners and clinicians who inhabit this lived reality. When taking part in the VRE session, D5, an experienced principal dentist, stated "*You don't learn that in a day. This is 30 years of experience*." This suggests that leadership activities do need to be recognised and learned, and perhaps continually honed and developed across a career. There will be areas necessary at initial entry into the profession around patient care and running the surgery. It is likely that the running of the business activities are some that could be developed more longitudinally over time.

Limitations of the study include practical difficulties in accessing the setting and special thanks must go to the dentists who were confident enough to be filmed throughout their working day. The potential for the Hawthorne effect, and practical equipment issues were mitigated as much as possible with small and unobtrusive equipment – but this meant that on occasion the sound or picture quality was reduced. Purposive sampling practice was deliberately chosen to provide a diverse sample of dentists; it is possible that using more than seven cases would have supported new and additional areas of interest that would have added to

Table 2
Rules identified and their associated activity systems.

Rule	Examples of variance	Activity System identified within (PC, RS, RP)
The nurse speaks and interacts with patient as agreed with dentist during clinical appointment	Agreement between dentist and nurse as to if, when and how much, nurse interacts with patient (mostly tacit – causes challenge if not agreed and nurse and dentist have differing ideas)	PC, RS
Either nurse or dentist collects patient from waiting room	This is pre-agreed and may be flexible in response to situation/patient or staff need	PC, RS
Talk to the patient from in front of them not behind their head	Universal tacit rule – many issues/challenges to following it	PC, RS
Dentist takes charge/is the team leader	Even if another is given responsibility for specific task(s). Exception in activity system three (RP) in DBC, where company is in charge of some things e.g. recruitment of staff	All
Dentist looks after patient, nurse looks after dentist	Universally observed tacit rule	PC
Dentist looks after nurse	Universally observed rule – tacit and explicit	RS, RP
There are specific ways of behaving with and in front of patient	These are pre-negotiated/ agreed between teams. Explicit and implicit – often tacitly followed	All
Dental nurse needs to be happy	Universally revealed via VRE	All
Dental nurse needs to be steps ahead of dentist and constantly vigilant to what dentist is doing and saying (while patient in chair)	Universally agreed as rule and led to dilemmas and trouble when it was not followed	PC
Patient should get value for money and feel looked after. Patient experience is paramount	Implicit and universal	PC, RP
Nurse prepares and manages surgery	Pre agreed/negotiated/ universal	RS
There is clear space allocation in surgery (dentist side; nurse side)	Pre agreed or negotiated – this may require explicit negotiation where dentist/ nurse teams are unfamiliar	PC, RS
All staff and patients expected to follow societal rules and accepted norms	These may need explicit parameters where there is disagreement	PC, RP
Dentists should be aware of good timekeeping and if they are running late (acceptable limits)	Implicit and subject to different parameters of acceptability	All
Division of labour has to be explicitly understood and negotiated	This may be organically derived or explicitly negotiated	All
Nurse completes patient charts for dentist	Universally observed rule – no explicit input even where teams are unfamiliar	PC, RS
Designated person makes refreshments at specific times	This is subject to individual variance, but was observed universally across all participants	RS
There are specific processes for when and how to charge patients	Universally observed but flexible depending on individual dentist. The only constant was understanding that patient does have to pay or prove valid exemption	PC, RP
Dentists need to work efficiently, speedily and constantly during a session, with one break only for lunch	Universally observed and commented on in VRE. May need explicit negotiation with team for each individual dentist (where additional breaks were required by anyone these were negotiated explicitly)	All
Patients need to attend in line with the agreed appointment book; follow advice and self-care; plan and be available to attend future appointments; listen, understand and consent to treatment; pay for treatment received	Universally observed and implicitly alluded to in VRE	All

the outcomes. It would have been advantageous to have more than one participant from a DBC, a more diverse ethnic mix in the dentists, and to widen the geographic boundaries of the study. The richness of the data and the subsequent level of the findings do, however, minimise these risks.

The findings here have enabled a clear demonstration of how leadership is related directly to patient care. Very often leadership is viewed as something independent of the 'clinical' encounter and outside of the surgery, but this study highlights the relevance and importance of leadership to the dentists themselves across their day-to-day activities, in and out of the surgery.

The dentist-nurse relationship is fundamental to efficient activity while also having the potential to give rise to multiple challenges and tensions. This was seen to impact on every system in varying ways, as well as on the wellbeing of the dentist, all with significant consequence. Summarised by two participants independently; "*once your nurse starts having a meltdown it all goes to pot – you need to look after them*" D6, and "*…to be honest, if she's happy and calm then I'm happy and calm.*" D2

Developing and maintaining effective relationships requires emotional intelligence to embed the awareness of one's own emotions and their impact on a situation or relationship as well as the reciprocal influence of the other person and their responses [45]. Dentists need to be mindful of their relative position of role and status (such as employer or colleague) and the potential power differential, which may also engender a reaction in another [20]. An effective relationship is therefore imperative and a friendly and conscious expectation from the dentist that the nurse is there as part of the team to be supported, not just to follow instructions and clean up after them, may perhaps facilitate a respectful atmosphere and enhance this. The relationship works best when the dentist shows genuine concern and care for their nurse, in line with the ideas of Authentic Leadership [46,47] and the 'individualised consideration' element of Transformational Leadership [48]. These theories should not be accepted without critique; including that they may be biased toward a male standpoint, require positive moral perspective and psychological capital, and may not take the follower response into account [49–51]. Without this insight, the concern could be appearing to be heading back to the dark days of medical paternalism and being overly influenced by the clinician rather than toward the contemporary idea of patient centred leadership [52].

Such leadership ideals can facilitate higher quality relationships and a positive response when the dentist is perceived as authentic, open, truthful and willing to invite participation in decision making, so that the nurse feels "empowered and supported in their work" [36,46].

The relationship between the practice principal and the associates in the practice was noted to have significant impact on how a surgery and practice runs for the benefit of patients. That associates were more connected to the running of a practice if they had a positive personal relationship with the principal, and that this tended not to occur at all in

a DBC, was of note. Principal dentists and practice owners can optimise or negatively impact the entire achievement of a practice – including the patient experience – through their relationships and teamworking with those they employ. The disconnect between the experience of associate dentists who work in a corporate environment versus an independently owned practice (regardless of whether this runs under private or NHS arrangements) was an interesting and unexpected discovery. Anecdotally in the profession DBCs and independently owned practices are noted to be 'different', and this study highlights where some of those differences occur and what the impact of them might be – for patients as well as the dentists who care for them.

Team and interprofessional working is highlighted throughout education and training of dental professionals and reinforced by the GDC. This study provides an evidence-based view to support why and how it is important. It is the first to demonstrate how leadership is involved, and how it is enacted in the daily work of a primary care dentist. This is therefore a starting point for a new, context sensitive evidence base for leadership in dental practice recognising that much of this is underpinned by the development and maintenance of positive relationships and Emotional Intelligence.

CRediT authorship contribution statement

Sally Hanks: Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Debby Cotton:** Writing – review & editing, Writing – original draft, Supervision.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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