

COVID-19 – the impact on wellbeing of the dental team in a secondary care urgent dental hub

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Key points

Anxiety and stress were experienced by dental team members due to the pandemic and changes to their norm.

The dental team were able to adapt well to assist the greater medical healthcare service through redeployment.

The whole dental team should be included in wellbeing support and services throughout pandemics, including when normal activity resumes.

Abstract

Introduction Dentistry in the UK has been thrown into turmoil as COVID-19 made its mark on the nation. The sudden shift in daily life has had a huge impact on the dental workforce. As the pandemic continues to ravage across the globe, we must look at ways of maintaining patient care and the wellbeing of staff. It becomes prudent to reflect on experiences to date and lessons learnt, which is illustrated through this study investigating the effect on the wellbeing of the dental team in a single unit hospital setting.

Materials and methods Fourteen focus groups were held including multiple grades on a voluntary basis, with a discussion schedule including suitable prompts. Responses were transcribed, maintaining anonymity throughout, and thematic analysis was performed on the verbatim transcript to identify common themes and direct quotes.

Results Key themes that were highlighted included anxiety, safety concerns, teamwork, family and redeployment. The themes of anxiety and safety were further explored, identifying participant discussion of feeling isolated, confusion, and specific concerns about PPE and transport to work.

Conclusion This study identifies reasons to establish support networks for the dental workforce across the UK, highlighting the true adaptability of the dental team and the ability to break barriers to aid in combating a global pandemic.

Background

Dentistry in the United Kingdom (UK) has been thrown into turmoil by coronavirus disease 2019 (COVID-19), which was labelled as a global pandemic by the World Health Organisation.¹ Guidance from the Chief Dental Officer and NHS England halted all routine and non-urgent dental activity in March 2020,² with the risk of transmission to patients and staff particularly through aerosol generating procedures (AGPs).

Dentists and other oral health workers as part of the frontline healthcare workforce are at extreme risk of COVID-19,³ with a close working environment and high transmission risk.² This understandably poses a great level of stress and anxiety to all members of the dental team. Additionally, for many in primary and private care, there have been huge financial ramifications and careers have been impacted for those in training. Further hazards for healthcare workers during this pandemic have been suggested including long working hours, psychological distress, fatigue, occupational burnout and stigma.⁴ The wellbeing of healthcare workers has also been affected due to the increasing infection rate among fellow healthcare colleagues.⁵

The UK government encouraged working from home where possible, which increased the number of telephone consultations carried out by the dental workforce in both primary and secondary care.⁶ Many members of this multi-skilled workforce were also redeployed during the pandemic to increase effectiveness and capacity of the health sector.⁷

During the pandemic, local dental networks, commissioners and local dental committees established 700 urgent dental care centres in England,⁸ treating patients with facial swellings, trauma and severe dental pain as defined by Royal College of Surgeons guidance,⁹ which was provided at the Royal National ENT and Eastman Dental Hospitals for northern and central regions of London. Patients were initially triaged via telephone, followed by face-to-face consultations and treatment provided where necessary. This included the provision of AGPs with the use of filtering face protector masks (FFP3), disposable gowns and eye protection.⁶

The sudden shift in the profession, lockdown and personal life ramifications from COVID-19 has had a huge impact on the lives of the dental workforce on many levels. As the pandemic continues to ravage across the globe, we must look at ways of maintaining patient care and the wellbeing of staff by reflecting on experiences to date and lessons learnt.

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Table 1 Focus group discussion schedule

Questions	Prompts
How did you feel working during the pandemic?	Feelings/worries/anxieties? Positive/negative?
Did you feel safe coming in to work?	Transport/availability of face coverings?
Did you feel supported by your team?	Fellow colleagues/seniors/management
How did you feel about wearing the current PPE?	Availability/comfort/donning and doffing
How did you find your roles in redeployment within the trust/UDC?	Training/hours/familiarity
Were there any personal circumstances that you felt put you at further risk during the pandemic?	Shielding/vulnerable person at home/BAME

- Anxiety
 - Confusion
 - Feeling isolated
- Safety
 - PPE
 - Transport to work
- Teamwork
 - Communication
 - Organisation
 - Integration
- Family
 - BAME
- Redeployment
 - New skills
 - The new norm

Fig. 1 Key themes from thematic analysis of focus group discussions

Aim

This paper aims to illustrate the effects of COVID-19 on the wellbeing of the dental team in a single unit hospital setting.

Objectives

The objectives of this study were:

- To understand the impact of the COVID-19 pandemic on the wellbeing of the dental workforce at the Royal National ENT and Eastman Dental Hospitals
- To identify the common themes expressed by members of staff.

Materials and method

Fourteen focus groups were held in July 2020 in groups of two to four participants of similar grade over a period of two weeks, accounting for social distancing. Staff members were approached via e-mail and written notice in public areas. Participation was on a voluntary basis and held during working hours. The

lead researchers (BS and JB) led the focus groups and were the only other members present in the private setting. JB had prior experience in conducting focus group studies and BS had researched the conduction of focus groups before this study. Responses were recorded by dictaphones and later transcribed anonymously into a word-processed document. Each participant completed a demographic questionnaire including gender, ethnicity, grade and their main working department. A qualitative research study was chosen to provide a broader insight into the views and attitudes of staff members, and preferential to a survey to encourage richer discussion with depth and avoid binary responses.

Discussion schedule

The questions asked are shown in Table 1, including prompts used to expand discussion during each focus group and to reduce the risk of bias. Thematic analysis was performed on the verbatim transcript using NVivo 12 (QRS)

software. Identified themes were organised into nodes, which were analysed to ensure that they represented quotes extracted from the data and subsequent analysis was carried out to ensure the nodal structure was representative of the data as a whole. Any confused views were also identified and reported in the results and discussion. An outline of the key themes identified via qualitative analysis of the verbatim transcripts is presented (Fig. 1) and direct quotes from the focus groups have been included. The authors have used NVivo¹⁰ to order the array of concepts discussed into themes relating to wellbeing.

Results

Fourteen focus groups of a total of 40 participants were carried out over five dates, in private settings conducted by the researchers. In total, 85% (n = 34) of participants were female and 15% (n = 6) were male. The majority of participants were dental nurses (60%, n = 24), speciality doctors (17.5%, n = 7), speciality registrars (10%, n = 4), dental core trainees (10%, n = 4) and there was one consultant (2.5%). A total of 35% of participants were white (n = 14) and the remaining 65% (n = 26) were of Black, Asian and Minority Ethnic (BAME) groups.

Themes

Anxiety

Anxiety was highlighted by 18 participants in the focus groups and the words 'anxious' or 'anxiety' were mentioned 32 times in total. The words 'worried' and 'worry' were expressed by 26 participants and mentioned a total of 42 times during the discussions. This highlights a huge focus on fear of the unknown, particularly changes to daily activity and not necessarily about contracting COVID-19, as quoted below by participants:

- *'[...] it was really scary because it was the unknown and we didn't know what we were doing'*
- *'I think everybody got quite worried about it, then it clicked that this is quite real now'*
- *'[...] we were stepping into unknown territory'.*

Feeling isolated

Isolation has been mentioned by some staff members within the focus groups, which has been previously highlighted by British Dental Association research as a factor affecting wellbeing by primary care dental professionals:¹¹

Table 2 Breakdown of participant involvement across different specialities

Department	Number of participants	Percentage of participants (%)
Restorative dentistry (RD)	15	37.5
Oral surgery (OS)	12	30.0
Special care dentistry (SCD)	4	10.0
Procedure zone (RD, OS, SCD, paediatric dentistry)	9	22.5
Total	40	100

- 'I find it quite isolating coming into work when the whole world was inside'
- '[...] it was quite isolating being at home'
- 'I felt less isolated coming into work with social interaction but did feel anxious'.

Confusion

New guidance was issued on a weekly basis and was seen as a stressor by some participants, with drastic daily changes within the hospital, impacting on the wellbeing of the workforce:

- 'As a senior nurse I was very worried because I thought everybody would be asking me questions and I wouldn't have the answers'
- '[...] the confusion was around the rules, they were changing on a daily basis'.

Safety

The word safety was mentioned 32 times within the focus groups, highlighting the importance of feeling safe for staff members during the pandemic, particularly in reference to suitable personal protective equipment (PPE) and their daily commute.

PPE

All focus groups mentioned good availability of appropriate PPE; however, many participants suggested that the adjustment to level-three PPE suitable for AGPs was difficult. The main concerns highlighted included the uncertainty of wearing PPE correctly to provide maximum protection, discomfort during lengthy procedures and the ongoing changes to the level of PPE required. There was also a focus on the lack of adoption of fit testing within the early stages of the pandemic, which is now in place:

- '[...] we don't even know if we have been wearing it all correctly'
- 'It's hard to wear a mask 12 hours a day, it's hard to breathe'
- '[...] there was everything, FFP3 masks, disposable visors, a hood if you wanted to wear that'

- 'I'm struggling to breathe even for a short procedure and in theatres'.

Transport to work

There was a mixed consensus regarding the safety of travelling into work. Transport for London announced a temporary suspension of congestion charges and parking permits were issued to key workers during the first UK lockdown. This allowed staff members to drive in to work, which provided a heightened level of safety for these staff members. In comparison, staff members stated that public transport was safe due to the lack of the general public using these services. However, many still felt initial anxiety and hesitance to use public transport:

- 'The public transport situation was fine because you could socially distance from people'
- 'I felt really safe on the trains because I had the whole compartment to myself'
- 'I still have concerns about travelling in because I come in on the bus'.

Teamwork

Communication

The theme of teamwork and support was greatly evidenced throughout the focus group discussions, with team spirit, morale and encouragement evidenced during the pandemic despite changing work structures. The words 'support' and 'team' were mentioned favourably in all focus group discussions, with quotes mentioned below:

- '[...] we had a good team spirit I must say'
- 'We are always behind our team'
- 'It brought all of our strengths out, and we might not have seen that before'
- '[...] we were always supporting each other'
- 'I had good support and good team morale here which made it easier'.

Organisation

It was also highlighted by all the senior nurses included in the focus groups that the pandemic allowed for their teams to be brought together

quickly with rapid re-organisation and there was a generalised feeling of pride, as mentioned by senior nurses' comments below:

- 'It's also worth saying that our team worked well to our strengths, you share your knowledge. It definitely improved communication and I think it was actually a really positive thing we got out of it'
- '[...] the feedback I got was brilliant and it was so nice to hear, I was very proud of them all'.

Integration

It was highlighted by all focus groups that the pandemic provided an increased level of collaboration of different specialties and this was a huge positive development for team morale within the dental hospital, as quoted below:

- 'Everything has changed for the better, it's integrated specialties'
- 'It was quite exhausting but having everybody here from different teams helped and made it easier'
- 'Working with new people was good and we got to bond with different people'
- 'I think it was really nice to finally meet everybody that works here instead of just writing them letters'.

This allowed for barriers to be broken between teams and enabled specialties to work together on a daily basis, through redeployment and the formation of the Urgent Dental Centre (UDC). A breakdown of participant involvement can be found in Table 2.

Family

It is worth mentioning that 17 participants (42.5%) mentioned that, as a key worker, they were not concerned about contracting the virus themselves, but more being an asymptomatic carrier and passing it to family members unknowingly:

- '[...] if I get it, I get it, that's never been an anxiety for me, I worry that I could get it and pass it on to an elderly relative'
- 'I live with family and giving it to them was my biggest concern'.

BAME

Although 65% of participants were from the BAME community, little additional anxiety or fear was expressed regarding higher risks of contracting COVID-19 in BAME groups:

- 'I did get quite worried when the whole BAME thing came out, that was scary'
- '[...] it puts a bit more pressure on you knowing that the statistics were out there'

were able to work remotely welcomed the break from direct clinical care as a positive experience, highlighting a reduction in psychological distress.¹⁹ There has been a large focus on improving the wellbeing and support of staff at University College of London Hospitals NHS Trust (UCLH) through wellbeing champions, specific counselling and drop-in sessions with the staff psychology and welfare service. We acknowledge this is the benefit of facilities at a large trust in secondary care.

Research shows that post-traumatic stress and psychological distress were evidenced with healthcare workers being in direct contact with patients during times of emerging virus outbreaks.²⁰ A recent rapid review on the psychological impact of healthcare workers following viral outbreaks highlighted that symptoms of post-traumatic stress disorders were found up to three years after the 2003 SARS pandemic.²¹ This emphasises the need to monitor and support healthcare workers over a longer period as the true psychological impact may only manifest once the immediate threat of the pandemic has dissipated. Many participants stated that they were used 'to just getting on with the job', which may have reduced initial and immediate psychological stresses but the possible long-term impact is unknown. A recent wellbeing study within the UK has also found that many key workers expressed higher levels of life satisfaction during the pandemic with a feeling of importance, sense of purpose and appreciation.²² Reported lower levels of psychological distress of hospital dentists compared to GPs, and in particular practice principals,¹⁹ may be explained due to redeployment roles on the frontline and the feeling of importance, as shown in this study with many participants highlighting the positive experience of being part of a larger team through UDC activity. Recommendations following previous pandemics to deal with psychological impact during outbreaks include staff 'buddy' systems, sufficient time off and recognition of staff efforts.²⁰ This is very important to take into consideration by NHS England, senior management and supervisors to ensure that the wellbeing of dentists is still taken into account in years to come.

A new online resource tool has recently been published to provide guidance on wellbeing specifically for the dental team, focusing on self-care, personal life and

sources of additional support.²³ This is a huge step forward in ensuring that the dental team is not forgotten about once the current pandemic state comes to an end and the true effects of wellbeing come to the surface. This document lists a great number of resources and organisations who can provide further support for dental team members, including specific advice from the Every Mind Matters campaign.²⁴

These focus groups informed us of staff members' views during the height of the pandemic, which may not have otherwise been formally expressed. These opinions were specific to the 40 participants involved in the study and cannot be deemed generalisable to the whole workforce of the hospital. The reduced volunteer uptake may be due to a number of reasons including lack of incentives, worry of being identified, time constraints and social distancing restrictions. The authors attempted to ensure that similar grades were placed in each focus group to avoid senior members of staff being present in a junior focus group. Clear signposting of this at invitation may have increased participant uptake.

Conclusion

The themes that have been drawn from this study identify reasons to establish support networks for the dental workforce across the UK. Locally, we found many positive accomplishments including integration of teams and the support of senior management throughout the pandemic, which will inevitably be echoed across many services nationally. It highlights the true adaptability of the dental team and the ability to break barriers to aid in combating a global pandemic. All members of the dental workforce, including community, primary or secondary care settings, can access support directly for their wellbeing as mentioned below.

Resources available:

1. 'Wellbeing support for the dental team' available at: <https://madeinheene.hee.nhs.uk/Portals/0/Wellbeing-Support-for-the-Dental-Team.pdf>
2. Every Mind Matters available at: <https://www.nhs.uk/oneyou/every-mind-matters/>
3. NHS Practitioner Health available at: <https://www.practitionerhealth.nhs.uk/accessing-the-service-for-doctors-and-d>

Ethics declaration

UCLH Ethics Committee deemed the project as a service evaluation and therefore the need for ethics approval was waived. An exemption letter was provided. All participants consented to participate in the study and their data to be used as part of the research study (written consent form).

Author contributions

BS and JB conducted the study, analysed results and collated participants' comments for the article. BS wrote the main body of the article, JB provided further additions to the article and completed the referencing of all papers used. SK supervised the whole study and reviewed the article, providing additions where necessary.

Conflict of interest

The authors declare there are no conflicts of interest.

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