

ENT trainees' experience of redeployment during the coronavirus disease 2019 pandemic: a qualitative study

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Main Article

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Cite this article: Lion P, McClenaghan F, Hall A, Mackinnon S, Navaratnam AV. ENT trainees' experience of redeployment during the coronavirus disease 2019 pandemic: a qualitative study. *J Laryngol Otol* 2021;1-5. <https://doi.org/10.1017/S0022215121000840>

Accepted: 4 February 2021

Key words:

COVID-19; Coronavirus; Otolaryngology; Workforce; Education

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Abstract

Background. As a response to the acute strain placed on the National Health Service during the first wave of coronavirus disease 2019 in the UK, a number of junior doctors including ENT trainees were redeployed to other clinical specialties. This presented these trainees with novel challenges and opportunities.

Methods. A qualitative study was performed to explore these experiences, undertaking semi-structured interviews with ENT trainees between 17th and 30th July. Participants were recruited through purposeful sampling. Interview transcripts underwent thematic analysis using Dedoose software.

Results. Seven ENT trainees were interviewed, ranging from specialty trainee years four to eight ('ST4' to 'ST8') in grade. Six core themes were identified: organisation of redeployment, utilisation of skill set, emotional impact of redeployment, redeployed team dynamics, concerns about safety and impact on training.

Conclusion. The ENT trainees' experiences of redeployment described highlight some important lessons and considerations for future redeployments.

Introduction

The coronavirus disease 2019 (Covid-19) pandemic has had an extraordinary impact on healthcare systems globally. During the first wave of the disease, the strategy of rapidly increasing medical and intensive care staffing levels was fundamental to amplifying clinical capacity in order to manage the surge of acutely unwell patients.¹ This workforce expansion relied on the recruitment of recently retired staff,² the upskilling of medical students^{3,4} and the reorganisation of internal hospital staffing arrangements.⁵

The system of junior medical staff redeployment to higher demand clinical areas during the first wave of the Covid-19 pandemic was commonplace.⁶ For surgical trainees, this has impacted significantly on their training, as elective operating often ceased and they were temporarily removed from their usual clinical duties.⁷

In the case of the otolaryngology fraternity across the globe, redeployment has taken multiple forms, with varying degrees of utilisation of existing skill sets.^{8,9} In the USA, one set of ENT surgeons documented their role in the running of an intensive care unit.¹⁰ In the UK, the redeployment of ENT trainees was widespread and provided trainees with novel challenges. These have not previously been encountered in the training programme and as such we endeavoured to describe these experiences.

Materials and methods

Design

We undertook phenomenological research in the form of semi-structured interviews of redeployed ENT trainees. The interview format was developed by four of the authors (PL, AN, FM and AH). A pre-interview questionnaire was also developed to help guide the interview process.

Recruitment

Participants were identified by purposeful and then snowball sampling. Trainees known to have been redeployed were contacted by e-mail and then asked to suggest further participants if possible.

The selection process purposefully identified trainees from multiple different regions and hospitals. Potential participants for interview were selected based on availability and willingness to participate, so as to facilitate a rapid review. Data saturation was used as the end point to recruitment.

Table 1. Details of study participants and their redeployment

Participant number	Grade	Length of redeployment (weeks)	Area of redeployment	Previous experience?
1	ST7	2	Medical subspecialty	No
2	ST4	6	Intensive care	Yes
3	ST6	12	Medical subspecialty	No
4	ST6	12	Medical subspecialty	No
5	ST8	8	General medicine	Yes
6	ST8	8	General medicine	Yes
7	ST5	12	Medical subspecialty	No

ST = specialty trainee year

Interviews

After agreeing to take part in the study, participants were interviewed at a time convenient to them. They were asked to complete and then return, by e-mail, the pre-interview questionnaire prior to this. The interviews were conducted either in person or via a video conferencing tool (Microsoft® Teams) depending on participant preference. With participant permission, the interviews were recorded and then transcribed using voice recognition software (Microsoft Word). These transcripts were then manually checked to confirm accuracy (by authors PL and FM) and subsequently anonymised.

Data analysis

The thematic analysis was undertaken using Dedoose® software. Transcripts were reviewed by the lead author, and then subsequently by authors FM and SM. Through an inductive thematic analysis approach, themes were identified and, subsequently, codes arising within these themes. This was achieved through multiple meetings between the reviewers to discuss the data interpretation and ensure consistency. Coding was then undertaken by authors FM and PL, with each transcript being double-read and coded.

Results

Between 17th and 30th July 2020, seven ENT trainees were interviewed. Trainees were between specialty trainee years four and eight ('ST4' and 'ST8') in grade, and were from three different hospital trusts in the UK. There were four males and three females interviewed, with ages ranging from 31 to 37 years. Redeployment had been to either critical care or to a medical specialty. At the time of interview, all had returned to working in ENT, and the length of their redeployment had been between two weeks and three months (Table 1).

Initial review identified 20 sub-themes with 6 core themes (Figure 1). A total of 175 codes were identified in the analysis. Thematic redundancy was achieved by the sixth interview and this was confirmed by one further interview.

Core themes

Organisation of redeployment

The initial organisation and introduction of redeployment for ENT trainees was discussed at length by the interviewees. All the trainees spoke about the short notice and uncertainty they experienced with regard to their redeployment. The

notice given prior to redeployment ranged from 1 day to 1 week. One trainee commented: 'there was a plan to redeploy but we didn't really know what that meant and what, where and who was being redeployed'.

Also discussed was the lack of trainee input into the decision-making process of where to assign individual trainees, with none of the interview cohort having any influence in their redeployment: 'We were given very little notice of this decision and were given no input into this decision. It was made unilaterally and imposed on [us]'. These negative feelings about the redeployment process were tempered by a general acceptance of the need for redeployment: 'My mindset going into redeployment was that I was going to do whatever was required to help out the services in this pandemic'.

On being redeployed, trainees received helpful and effective inductions into the new work environment, allowing fast integration into the new clinical setting: 'we had induction Zoom training for [the] intensive care unit care and ventilators. It was an HEE [Health Education England] programme and it was really good, I was very impressed'. However, with the progression of the pandemic, there was a reported lack of feedback to the trainees giving any timeframe of likely return to ENT practice.

Utilisation of skill set

Whilst working in the area of their redeployment, the interviewees felt that their pre-existing skills were not utilised, causing some consternation: 'We basically just felt we were offering nothing'. The skill sets developed through ENT training were often not suitable to the clinical scenarios they were dealing with.

Where the opportunity to use pre-existing skills was present, this was not employed by the new team, either because of a lack of awareness of the skill set or a perceived undervaluing of those skills. Trainees felt that their skill sets could have been utilised in certain roles but that this opportunity was not exploited: '[it] was never recognised that I had potentially that skill set'.

Emotional impact of redeployment

There was a strong feeling of emotional satisfaction from the engagement of the trainees in roles outside of their usual practice during a time of national need. However, this was often tempered by a feeling of inadequacy and of being unable to perform the tasks required in their new roles.

In some instances, when combined with the intensity of the clinical work, this led to feelings of emotional exhaustion and burnout: 'I felt overwhelmed by dealing with so many sick patients'.

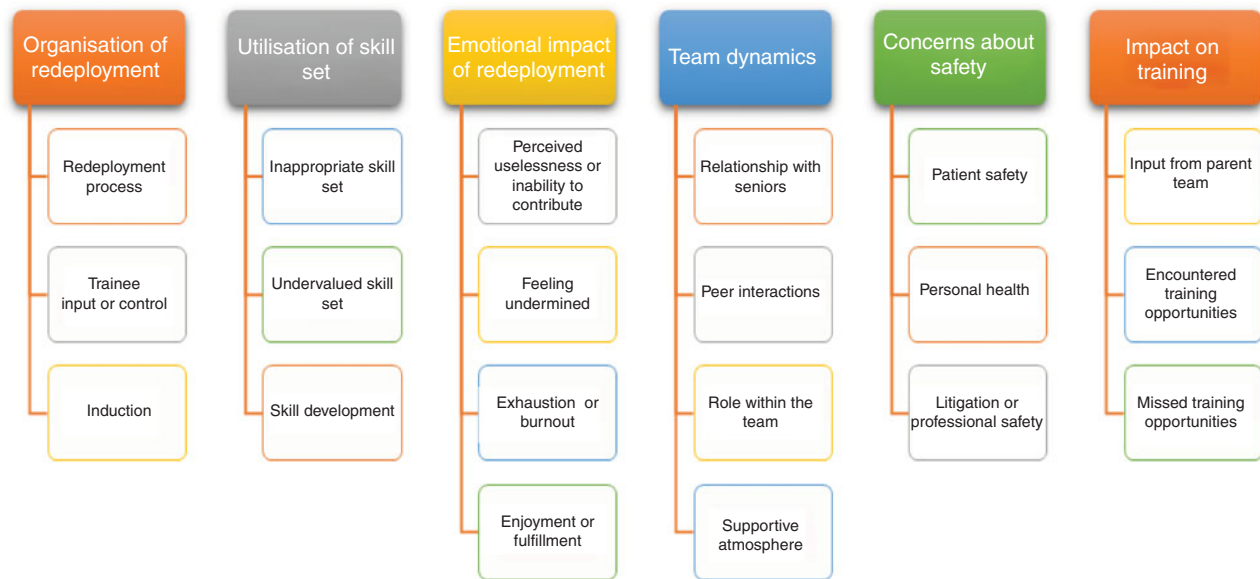


Fig. 1. Chart of themes and sub-themes identified during thematic analysis.

Redeployed team dynamics

The dynamics encountered in the newly formed teams was often found to be positive. Senior support was reported to be readily available, and, in some cases, the presence of pre-existing relationships with other members of the new team led to easy and smooth integration: 'it was well supported so there was always someone there to see the patients and to escalate to'. However, some interviewees did report that being rapidly integrated into a new team was at times problematic, resulting in the already described feelings of uselessness and being under-utilised: 'I would have to tell the registrars and the consultants that I was an ENT trainee and I can do this and that. Some people didn't know'.

Concerns about safety

The exceptional circumstances the interviewees found themselves in led to a number of them reporting feeling concerned about patient safety. This was allied with concerns about litigation arising from the potential for mistakes in the patient care they were providing: 'It's the whole Swiss cheese sort of effect'. Some of the trainees ascribed these concerns as due to the heavy workload that was placed upon them.

In some instances, interviewees ended up declining to perform certain tasks because they did not feel safe and competent to undertake them: 'they were trying to make us a little more independent. We were resistant to that as it was very far out of our comfort zone'. This included prescribing unfamiliar and particularly toxic medications, and performing procedures that individuals had not practised for five years or more.

Issues about personal health and wellbeing were mentioned. However, on questioning, the trainees reported low levels of concern with regard to contracting the virus and spreading it to friends and family. Availability and utilisation of personal protective equipment (PPE) was reported to be good: 'We had full PPE'.

Impact on training

All the participating trainees reported concerns about the impact their redeployment had had on their training. Whilst some of the work undertaken was relatable to ENT practice,

much of it was felt to be of little use in their development. Some interviewees reported that there were trainees in the same hospital still gaining the benefits of ENT exposure through remaining on the on-call rota and engaging in the provision of emergency care. This led to a feeling of concern that their redeployment was negatively affecting them when compared with peers: 'I missed out on any emergency operating that happened during that time having not been on ENT. So yeah, I massively missed out'.

A number of the interviewees also highlighted a feeling that they did not receive ongoing support from their parent ENT team. However, at the time of interviewing, none of the trainees felt that the period of redeployment would necessitate them spending extra time in training to achieve the requirements necessary for certification.

Discussion

With the reorganisation of the healthcare system in the UK to prepare for the first wave of Covid-19 cases, many clinicians were asked to perform novel tasks in novel environments at short notice. Through our qualitative analysis, we describe the ENT surgical trainee experience, and highlight areas that could allow us to better manage future situations whilst better understanding the impact of these decisions on the individuals involved.

No work had previously been undertaken on the effect of redeployment on ENT surgeons within the UK. Although analogous surgical subspecialties have published in the area,^{7,11,12} it is vital as a subspecialty that we explore the path taken and additionally the potential role that trainee ENT surgeons offer within an emergency pandemic setting.

Our qualitative approach allowed an exploration of the underlying issues with participant-directed flexibility of scope and greater depth than could be explored through quantitative means.¹³ This enabled us to gain a greater insight into the participant's experience and their perspectives. It also allowed us to further elucidate the specific issues important to ENT trainees in this process, and it has the potential to support other quantitative work in this area.

Redeployment experiences essentially came in two forms: firstly, that of 'clinical frontline' support to over-stretched specialties such as critical care. Secondly, that of 'contingency

support', where job roles were redefined to allow the maintenance of essential medical services in view of expected large-scale staff sickness and increased future need. We focused on the experiences of the trainees who were moved away from ENT to various other specialties, given that this sudden change in workplace responsibilities was truly exceptional.

- Many surgical trainees, including ENT registrars, were redeployed to other specialties during the first wave of the coronavirus disease 2019 pandemic in England
- Although redeployment experiences were variable, trainees appreciated that these measures were required
- Organisation and communication of redeployment strategies in trusts were not always clear, leading to frustration and some disengagement
- ENT trainees believed that their existing skill sets were not adequately utilised
- ENT trainees felt their lack of training and/or experience in clinical situations could compromise patient safety
- Lessons from redeployment help inform decisions regarding workforce utilisation, and are beneficial to 'donating' and 'receiving' specialties

Considering the demand that was being placed on frontline services by this new disease, redeployment was generally accepted with understanding by these trainees. There appeared a redefining of personal professional identity as a doctor rather than a surgeon, with individuals perceiving their contribution as towards a common goal.

The process of redeployment was carried out rapidly by individual hospital trusts rather than co-ordinated through a central body, and it often necessitated quick decisions that were communicated shortly before implementation to the trainees involved. This resulted in a post-event dissatisfaction in the process itself. This was often aggravated by a feeling that the choice of who to redeploy and where to redeploy them to appeared to have not been given due consideration or adequate stakeholder consultation. Alternative methods of enacting this process have been considered by exploring the ethics behind either an optional volunteering system or potentially even a lottery-based model in this sort of context.¹⁴

The redeployment process seemed to result in senior trainees being deployed to areas where their pre-existing skill sets were not utilised and they were asked to undertake clinical tasks that they had not practised for a significant amount of time. For example, the principles of airway management are a core aspect of ENT clinical practice and training, when compared to other medical and surgical subspecialty training. Hence, critical care may be a more appropriate role than other areas, as demonstrated in the USA.^{8–10} Within the broader literature on redeployment, it has been widely recognised that the lack of training for redeployed staff and failure to adequately consider the skill set of those redeployed is a problem in need of attention.¹⁵

In the event of further waves or pandemics, strategic preparations that include plans for redeployment could try and avoid the pitfalls of underutilisation by the engagement of subspecialty specific professional bodies in the planning stages. In addition, it would appear necessary that trusts, as part of their interpretation of the success of redeployment implementation, gain regular trainee feedback on the process as events unfold. Equally, the lessons from England in this process can be applied by other countries that undertake requisite preparation should similar circumstances emerge.

There was considerable difference in the length of time that the trainees' redeployment lasted, ranging from 2 to 12 weeks. Alongside the varied impact that the pandemic had on different parts of the country regarding requirements for different

intensities of emergency staffing, distinct trusts developed individual responses that were likely influenced by a number of other factors. It should be recognised that the retainment of redeployed staff in their new roles may have been the result of managerial inertia, rather than overt clinical necessity. The Royal College of Physicians released a statement highlighting that, where possible, redeployed trainees should be 'repatriated' as quickly as possible.¹⁶ The ultimate interests of the trainees, namely the swift return to their 'base' specialty, should be safeguarded through local departmental consultation and with the support of appropriate national specialty bodies.

Redeployment was not a universal experience for surgical ENT trainees, even within the same training region. This variation understandably brings with it associated anxiety. Redeployment creates uncertainty and job role ambiguity, and potentially affects conceptions of personal self-worth. Commitment to surgery or a surgical subspecialty is an essential component of career progression, and therefore a scenario where this is acutely challenged requires considerable re-calibration. 'Sense-making' is the process in which people work to understand novel events that are ambiguous, confusing or violate expectation.¹⁷ Clear personal identity and role clarity is seen as core to this process.

The new teams formed as a result of redeployment resulted in positive camaraderie amongst team members. Furthermore, caring for Covid-19 patients can generate a positive work environment, as shown in previous qualitative work from China.¹⁸ Within our work, senior clinicians overseeing ENT redeployed surgeons were noted to be supportive, and available for necessary help and advice.

However, this team spirit and senior support did not stop the interviewed trainees reporting a high emotional toll from the experience, mirroring that described by other groups of redeployed surgeons. In a recent review of surgical trainees redeployed to critical care, 53 per cent reported feeling that redeployment had had a negative impact on their mental health.¹⁹

The feelings of inadequacy associated both with the roles that ENT trainees were being asked to fulfil and with leaving their established teams potentially compounded an already stressful situation. It is possible that better use of their existing skill sets would have helped to reduce this emotional impact.

In Canada, staff stress, burnout and sickness were significantly higher amongst staff in hospitals treating severe acute respiratory syndrome patients 18 months post-outbreak. The protective value of staff perceptions of organisational support (training, protection and moral support) was highlighted.²⁰ Strong pastoral support for redeployed trainees is clearly an essential element for future successful emergency redeployment protocols.

There were several reports of ENT trainees having concerns regarding patient safety during their period of redeployment, particularly regarding requests to perform clinical duties that trainees felt unfamiliar with or out of practice in undertaking. Whilst reference was made to the statements by the General Medical Council about work undertaken in these circumstances,²¹ there was understandably a general unease about the risks being taken and the potential for future litigation against the trainees. Further support and recognition of this aspect is critical, particularly within the context of recent legal cases such as the Hadiza Bawa-Garba case.²² This experience is supported by a recent national British Medical Association survey, which reported that approximately one-

fifth of UK doctors were not comfortable with tasks given to them in redeployment.²³

The themes of patient or professional safety were more prominent within our analysis than any personal safety concerns about exposure to coronavirus in redeployment. This mirrors other clinical and pandemic situations where the concept of a degree of personal risk is accepted as part of attendant privileges afforded through medicine (financial remuneration, or societal admiration or worth), as opposed to an alternative narrative of selfless personal sacrifice.^{24,25}

The negative effect of the pandemic on training opportunities for medical staff has been widely recognised.²⁶ One recent study demonstrated that it was the primary concern of redeployed doctors, highlighted by 61 per cent of respondents.²⁷ This was continually highlighted within our cohort. Whilst some training opportunities were experienced in the areas that trainees were redeployed to, it was generally felt that redeployed trainees were disadvantaged by being moved away from ENT. Recognition of this reality is important to ENT surgical trainees, where, as a craft-based specialty, requisite operative experience is important to their personal development.²⁸

Our work was undertaken through a qualitative paradigm and hence numerical data were not provided through our analysis. Instead, our thematic analysis, by achieving saturation, highlights the commonality of experience; it can provide a foundation for the future development of pre-emptive policies on redeployment, identifying areas specifically relevant to trainee ENT surgeons.

Conclusion

The redeployment of ENT trainees in the first wave of the Covid-19 pandemic was commonplace given the sudden need for an increase in clinical capacity across the National Health Service. These trainees will have had unique experiences, not before encountered in modern surgical training. We endeavoured to describe these experiences and highlight potential lessons for the future through a qualitative approach.

The cohort of ENT trainees we sampled had some positive experiences as a result of redeployment in the context of the pandemic. However, there were a number of specific issues and concerns raised. The ENT trainee experience offers lessons both for medical leadership and specialties likely to obtain redeployed trainees. Through our analysis, we highlight areas in need of further clarification and exploration in redeployment. We hope this experience can be harnessed to benefit both future trainees and the health service when the necessity for redeployment arises in future.

Acknowledgement. We would like to thank all the ENT trainees who took part in our study for giving up their time and providing valuable insight into their experiences of redeployment and its impact on training.

Competing interests. None declared

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