

Research Article

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A qualitative study of the psychological impact of COVID-19 pandemic on foundation year doctors

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Introduction

COVID-19 pandemic has caused tremendous disruptions to postgraduate medical education [1-3]. As the number of critically ill individuals increased, there was a need to make changes to meet up with staffing shortages in hospitals [1-3]. In the United Kingdom (UK), this has led to final year medical students provisionally registered with General Medical Council (GMC) and Foundation Year Doctors (FYD) offered full registration [1,2]. Foundation Year Doctors (FYDs) are newly qualified doctors in the UK who are undertaking post qualification training to become fully registered with the regulatory body, the GMC [4,5].

Prior to COVID-19 pandemic, stress, burnout and depression have often being reported by FYD [6-8]. This may be attributed to their unique role as being newly qualified doctors, leaners

Abstract

Globally, COVID-19 pandemic has immensely affected medical education including postgraduate medical education. This study used a qualitative approach to explore the psychological impact of the COVID-19 pandemic on Foundation Year Doctors (FYD). Ten semi-structured interviews were conducted. FYDs highlighted the changes in their academic training and working life that occurred during the COVID-19 pandemic and the psychological impact of these changes. This study may be helpful for key stakeholders of foundation training in developing evidence based policies and strategies that improve the wellbeing during and after the COVID-19 pandemic.

Keywords: foundation year doctors; COVID-19 pandemic; psychological impact; qualitative study.

Abbreviations: FYD: Foundation Year Doctor; UK: United Kingdom; NHS: National Health Service.

and care givers. There is a high chance that COVID-19 pandemic may impact on FYDs academic and clinical training. For instance, some FYDs have had to stop their rotation and some redeployed to support COVID management [9-11]. Moreover, all of these changes may have impacted on the psychological wellbeing of FYDs. A look into the psychological impact of COVID-19 may ensure measures are taken now to support FYDs and hopefully prevent long term mental disorders or some leaving the profession.

The aim of this study was to explore the psychological impact of the COVID-19 pandemic from the lived-experiences of Foundation Year Doctors. It is hoped that study will highlight the changes that occurred in the Foundation year training during COVID and the psychological impact of these changes. The research question is- What is the psychological impact of COVID-19 pandemic on foundation year doctors?

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Methods

A qualitative descriptive approach was used to gather the views and experiences of COVID-19 pandemic on FYD training. The choice of this methodology is based on its ability to allow researchers gather in-depth description [12]. In particular, this study covers the experience of FYDs during the first national lockdown in the United Kingdom and the months following it, thus it covers the pandemic period between March and August 2020.

Ethical approval was obtained from the Health Research Authority (HRA) and Health and Care Research Wales (HCRW) (IRAS project ID: 287664). In addition, access was obtained from the Trust Foundation training co-ordinator and the sample was drawn from a teaching National Health Service (NHS). All participants had access to the participant information sheet and completed the consent form before data collection proceeded. This is a longitudinal study and reports the second phase of the study. The first phase examined the effect of the COVID-19 pandemic first national lockdown in the United Kingdom on Foundation Year Doctors' (FYD) stress and burnout levels [13].

In this phase, purposive sampling was used to select potential participants. The inclusion criterion was that FYDs had to be employed by the Trust and worked during the COVID-19 pandemic from March to August 2020. Data was gathered using a semi-structured interview and interview protocol was developed based on personal experience, emerging evidence from previous literature, discussion amongst authors and a pilot study.

Two FYDs took part in the pilot prior to commencement of the full study. This was helpful in improving the clarity and simplicity of the interview questions. Semi-structured interview of about 30 minutes duration was conducted online via Microsoft Teams and audio recorded. Data saturation was achieved after interviewing Ten FYDs as no new information was generated. Audio-recording was transcribed in a typed form in preparation for data analysis. NVIVO v12 software was used to manage and organise data.

Thematic analysis was carried out inductively by the main author to identify themes based on its ability to generate trustworthy and insightful rich data [14]. Also, the use of an inductive approach helped generate themes directed by the content and not preconceived ideas or theory. Braun and Clarke [14] six-step procedure was used to identify themes. Familiarization, coding, theme development, revision, naming and writing up were carried out by the main researcher and this was agreed by two other authors. If there were disagreements, it was resolved by discussion.

Lincoln and Guba's [15] criteria was used to achieve trustworthiness and rigour. Credibility was achieved by triangulation. Triangulation was ensured by the main researcher discussing the findings with two other authors. If there were disagreements, it was resolved by discussions. Confirmability was attained by ensuring the interpretation and findings are derived from the data with themes and subthemes supported by quotes. Transferability was ensured by providing a detailed description of the research by all authors such that it can be easily applied in other context. Dependability was achieved by clearly documenting

the research process.

Findings

During the national lockdown, nine of the ten participants were Foundation Year 1 (FY1) with only one a Foundation Year 2 (FY2) doctor. More than two thirds (n=7) were working in a medicine department such as Acute medicine unit, Urology, Gastroenterology, and Infectious disease. The other three were working on the General Surgery, Emergency department and Intensive care department.

All FYD indicated that the COVID-19 pandemic affected their academic training because they missed a lot of teaching during the pandemic. Half of the FYDs (n=5) were asked to continue their present rotation while the other half (n=5) were redeployed to another department during the lockdown period. Also, majority (n=9) were placed on emergency rota.

Two themes were identified from the study and these are supported with quotes. The quotes derived from each interview transcription have been assigned a code in chronological order [1-10].

Psychological impact of the changes in academic training

All doctors initially expressed displeasure about changes to their training brought about by the COVID-9 pandemic. However, when questioned further, the doctors expressed mixed views about the psychological impact of the COVID-19 pandemic changes. For instance, three doctors felt that the changes in academic and clinical training have affected them negatively, as their competence and skills is not as holistic as expected and this may impact their career pathway in the future.

"I think my future probably lies in sort of internal medicine somewhere. I do feel as though I have missed an opportunity to work in a general medical environment and am not sure how that can be gained without impacting my career progression"- P9.

About two-thirds of the FYD were relieved about the changes. These doctors explained that the foundation training has inherent stress and burnout with factors such as academic portfolio requirement, clinical rotations, caring for patients all immensely contributing to the stress and burnout. Hence, they were relieved following the announcement from the deanery about academic requirement.

"One thing am glad about COVID is that it brought to mind how much we have to do as FYs, those online learning and all that. I was so relieve, like a huge burden removed about those requirement" – P6.

Some (n=4), were glad they were redeployed because they were not keen on moving to their original designated rotation. Meanwhile two others expressed that these changes have been entirely beneficial to them, although, one acknowledged that they missed out on formal teaching, but this has been compensated by the hands-on experience they have developed in their deployed clinical rotation.

"So, my next job was going to be a surgical job. And I don't really have any interest in surgery, although, for my own development, I do want to do a surgical job. So, I wasn't really that

upset about staying in medicine"- P8.

"I think it actually did me some good. Hmm, I found that on my geriatric rotation, the kind of exposure to clinical medicine was a bit limited. So, it's a bit of a blessing in disguise to be to be redeployed to acute medicine. So, in hindsight, I think my training wasn't really that negatively affected. In terms of the tick box, things such as the core procedures and portfolio requirements, that definitely wasn't met and there was a hold on those kinds of things. But I don't feel like by the end of the year that I've typically missed out on anything"- P6.

Two others expressed their disappointment explaining that FYDs have often expressed how time-consuming those portfolio requirements and often called for a review or the need for protected time to complete the requirement, but during the pandemic, all those requirements were reviewed or halted to allow FYD focus on patient care.

"You know we (FYs) doctors have often said those portfolio requirements are time consuming and we should have some sort of allotted time. I am now hoping that in the future, there is allotted time for learning"- P3.

Furthermore, three FYDs explained in detail that the inherent stress and burnout during the FY training have persisted over the years because of the Cultural expectation, inadequate support from the Trust, and the opinions of FYDs not reflected in policies.

"There's this kind of attitude towards stress and burnout as a FY where it's kind of part of the job and I still think it's a cultural thing that it's almost like you go into the job expecting to feel that way"- P10.

Psychological impact of the changes in working condition

Nearly all (n=8) FYDs managed COVID patients during the first national lockdown, with over half (n=6) indicating there were working on COVID ward also called 'hot ward'. All doctors who managed COVID patient stated that there had increased fear and anxiety at the start of the pandemic and this was due to the novelty of the virus, lack of guidelines on managing COVID, lack of Personal Protective Equipment (PPE), fear of contracting the virus and increasing mortality.

"I suppose in the very beginning, I had fears and apprehension, because I was worried that I myself might catch Coronavirus"- P1.

"Initially it was very much the unknown, which made it quite scary to be honest" – P4.

"When COVID started, we lacked PPE, and with the pretty inconsistent and inadequate kind of like regulations, they seem to be changing every week, that didn't help in anyway"- P5.

These fears and anxieties soon changed and three FYDs indicated that being informed that their demographics were least likely to contract COVID. Another doctor said it was the availability of PPE that was helpful, whereas two others said because they had contracted it and now have immunity, they are no longer worried.

"What I'd seen on the news and what other people were telling me is that they because I'm sort of young and healthy with no comorbidities and infection, I won't catch it and if I do it would probably be mild" – P1.

"I feel better now, there is clear guideline with the right PPE, now I always have properly fitted FFP3 mask, gown, and gloves everything. I now feel well protected" -P6.

"In my opinion, it was inevitable that I will catch it, as soon as I got it and I was better, I just stopped worrying" – P5.

Most FYDs (n=8) also stated that the working during COVID impacted their personal lives. For instance, nearly all FYDs stated that they found the rota quite stressful. Some (n=3) also stated that they felt alienated because people feared contracting the virus from them.

"The new rota was extremely stressful; it was physically quite taxing. It didn't leave much time to do other things" -P5.

"people not working in the hospital, it was quite overt and sometimes quite obvious that people were just scared to see me so, I don't blame them, but it leaves you with a lot less, like shoulders to cry on and people to support you"- P3.

Majority (n=9) also indicated that being in a small team was very instrumental in improving their wellbeing. They described the team as a small group of 4-5 persons composed of a consultant, registrar and other more senior clinical colleagues and a FYD. They talked about the small teams fostering great working relationship. These doctors also explained that having a consistent team helped them not to feel isolated and provided a good support network.

"We were all put in teams and I actually think that was probably the best thing for all of our mental health, it was such a good team and nice team to work in" P2.

"I guess a positive aspect of the whole COVID pandemic and lockdown was there was a lot of kind of team building and camaraderie between people, I guess, we are all inside a very pressurised situation and people were just nicer to each other and this help to build friendships"- P5.

Most (n=9) of the FYD did not have to worry about their family and loved ones will become infected with COVID as a result of working in the frontline because they were not living with their families. However, these doctors did indicate that they still took the necessary precautions to avoid spreading it to others in the community.

"I am in a position where I don't have any relatives or any family members or anyone around, but I live with my partner, and when I get home and at the front door the first thing I do was take everything off, put it straight into the washing machines and get in the shower. So I was really careful about spreading the infection"- P6.

Overall, all FYD stated that they now view managing COVID patient as part of their normal job. However, they still find the increasing mortality and having to break bad news to relatives very tiring especially because it is done remotely.

"Now, I don't have any reservation or issues about treating COVID, it what we are meant to do" – P1.

"To be honest, much the same as you know treating any other patient; it only gets to me rarely when you are thinking that a patient is too young to be this unwell. But I think, you sort of expect it in your medical career experience, but some are more traumatic, and you will carry that throughout your career" P8.

Discussion

Our findings confirm that COVID-19 pandemic has caused a number of changes to the Foundation Training in the UK and this has had psychological implications on FYD [1,10]. Reported changes such as, formal teaching being halted, rotations being cancelled and doctors redeployed are consistent with previous studies [1-3,9-11] and have also being reported in studies carried out globally [16,17]. However, one paper from China [18] expressed that academic training did not stop, rather, it moved online. Nevertheless, the authors [18] did acknowledge the challenges of online learning and reliance on electronic resources and self-study.

In the UK, before the pandemic, some aspect of the FYD learning takes place online. Hence, infusing online learning into the FY training is not new. However, not all aspect of the FY training can be delivered online and missing a potentially important clinical rotation can negatively impact FYD, especially their confidence level in patient management. The authors are aware that some hospital Trust and Deanery have come up with suggestions such as swapping rotations amongst FYDs and Up-to two weeks taster session in a clinical rotation of choice. Although, this may be helpful as FYD will not feel they have completely missed out and this may lessen their anxieties. However, these suggestions have inherent flaws. For instance, a FYD may not find a suitable individual to make a swop. Besides, having a one week taster just provides a small fraction of the skills and competence that can be developed when compared to a 4-month rotation.

It is interesting to note that FYDs were relieved about the halted/reduced training and portfolio requirement. This confirms previous studies about the foundation training having inherent stress in it [6-8]. In fact, the first phase of our study is consistent with these findings, the Maslach Burnout Inventory (MBI) scale indicated that FYD had moderate-high levels of stress and burnout pre-COVID and the level became significantly increased during the pandemic [13]. Moreover, our findings indicate that FYDs felt not listened to and their physiological wellbeing not taken into consideration when designing the foundation training requirement. Therefore, key stakeholders need to consider revising the FY training such that the it is not viewed as a stressful period rather, a learning phase aimed to build the skills and competence of FYDs.

Emotions such as fear, anxiety and worry described by FYDs when the pandemic started are consistent with other studies [19,20]. Doctors are known to be resilient [21]; hence, it is not surprising that FYDs have carried on working. Besides, the FYDs reported that the consistency in working with the same team helped build their resilience and improved their wellbeing. Considering this, it will be imperative that the deanery and Trust consider the continued use of a small team even beyond the COVID-19 pandemic. Besides, FYDs stated that being in a small group fostered more hands-on learning which compensated for the lack of formal learning.

During this pandemic, healthcare professionals have being recognised for their effort in 'saving lives'. In fact, in the UK, there was 'clap for heroes' where all frontline workers were recognised weekly and the whole nation was clapping throughout the first national lockdown. However, FYDs still reported covert discrimination. Behaviour like this from the public is expected, besides, emphasis on social distancing may inevitably foster such covert discrimination. Nevertheless, this may impact an FYD psychologically. Moreover, the harrowing experience of dealing with very ill patient and the increased mortality

further emphasis the need to prioritise wellbeing support for FYDs to prevent mental breakdown and post-traumatic stress after the pandemic.

Limitations

The limitation of this study is the small number and that it mirrors the psychological impact of the COVID-19 pandemic at a specific time. However, saturation was attained at the tenth interview. Considering that the pandemic is ongoing, we acknowledge that the views of the FYDs may change over time. Regardless, this study adds to the body of knowledge by providing a snapshot into FYDs lived-experiences of the psychological effect of the changes in their academic training and working life during the COVID-19 pandemic. A recommendation for further research is the need for longitudinal studies that evaluates the psychological impact, level of confidence and other long term effect of FYD missing out on clinical rotation.

Declarations

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Availability of data and materials: All data generated or analysed during this study are available on request.

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