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UK medical students' mental health during the COVID-19 pandemic: a qualitative interview study

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ABSTRACT

Objectives To understand the impact of COVID-19 on medical students with mental health problems.

Design Qualitative study employing in-depth semistructured interviews with medical students which were analysed using reflexive thematic analysis.

Setting and participants A purposive sample of 20 students originating from 8 geographically spread UK medical schools were selected, representing various mental health issues and demographic characteristics.

Results Three themes were identified: (1) medical schools' response to the pandemic—schools increased awareness-raising of mental health support and increased flexibility in regards to academic requirements; (2) disruption to the medical degree—COVID-19 brought change and uncertainty to medical education and missed learning opportunities reduced students' confidence and (3) psychological consequences of the pandemic—COVID-19 had a negative impact on mental health, most notably raising stress and anxiety but also triggering new or existing conditions.

Conclusions While there were many negative aspects of the pandemic for medical students experiencing mental ill health, there were also positives. Students felt that the increased focus on mental health support during the pandemic had reduced stigma towards mental health. Given stigma has been identified as a key barrier for help-seeking in medical students, future research should investigate the longer-term impacts of the pandemic and whether medical students are more likely to seek help for mental health difficulties postpandemic.

INTRODUCTION

There is concern about medical students' mental health: even prior to the COVID-19 pandemic medical students had a higher prevalence of depression, anxiety and burn-out than their non-medical student peers.[1–5] These elevated risks have been linked to various stressors related to medical school training: academic pressures, working in a challenging clinical environment exposed to ethical conflicts, death and suffering, and the medical school's support and culture, which includes the unspoken rule that illness is synonymous with weakness and doctors

should be strong.[6–10] Such stressors have profound consequences, not only in terms of the personal harm caused by mental ill health but also professionally, including attrition from medical school, impaired academic performance and medical errors.[7 11 12]

The pandemic caused huge disruption to the education sector due to government restrictions and social distancing rules.[13 14] Medical schools had to adapt. Clinical placements were disrupted and face-to-face teaching, assessments and examinations moved online, with some being cancelled or postponed.[15] There is limited literature available from the UK, but globally a growing number of survey studies of medical students overwhelmingly suggest the pandemic had a negative effect on their mental health[16–25]. For example, Michaeli *et al*'s study of 2280 medical students across 148 medical schools in 9 countries found students reported negative changes in both their mental and physical health.[19] A recent meta-analysis of 41 studies looking at the mental health of medical students during COVID-19, which included 36 608 students in 15 countries, found a pooled prevalence of 37.9% for depression and 33.7% for anxiety.[26] Given that prepandemic research has shown medical students have a higher prevalence of mental health issues than non-medical

students, more of them are potentially at risk from the impacts of the pandemic. The pandemic may either exacerbate existing mental health issues or be a causal factor for a new mental health difficulty. Understanding the impact of COVID-19 on medical students' mental health, especially those who have experience of mental health issues at medical school is of paramount importance, because the pandemic may affect these students more severely, and they may require greater support. Further, there may be valuable lessons to learn from the way medical students experience medical school during the pandemic versus prepandemic and students with mental health issues are uniquely positioned to enhance our understanding of this.

Most of the research to-date on the impact of the pandemic is quantitative, looking at prevalence and changes in mental health in the general population of medical students. This study is original, using semi-structured interviews to conduct an in-depth qualitative exploration of the personal experiences of medical students' specifically with mental health problems during the COVID-19 pandemic. A qualitative approach can be particularly useful in understudied areas because of the potential to uncover new findings.[27] There may be unexpected consequences of the pandemic for medical students with mental health problems, which have yet to be discovered. It is hoped by understanding students' mental health experiences, medical schools can be better informed of how to support their students with mental health difficulties both in the present and the future.

METHODS
Settings and participants
This study is part of a larger mixed-methods research project consisting of a survey, documentary analysis and interviews. This study solely reports on the interviews. Eight medical schools were selected varying in size, geographical spread across the UK and type of curriculum (integrated/non-integrated, see glossary provided as an online supplemental file 2 for an explanation of terms). The means of recruitment varied per school and included one or more of the following methods: announcements during lectures, tutorials, through student organisations, medical school email or newsletters, online announcement systems, flyers, posters and snowballing. Students who completed the survey were invited for interview. A total of 130 students volunteered to participate and were sent a short follow-up questionnaire to obtain their demographic details. Hereafter, 20 participants were purposefully sampled with the aim of gaining a spread of mental health symptoms, gender, ethnicity, sexual orientation, university and year of study. Students reported experiencing a variety of mental health conditions or symptoms (see table 1). Each medical school had between one and three participants. To be eligible to participate, it was not a requirement to have a clinical diagnosis. Students were advised against participating if they were acutely unwell.

Table 1 Interview participants

Demographic category	Participant numbers (%)
Gender	
Female	12 (60)
Male	7 (35)
Non-binary	1 (5)
Year of study	
Early (years 1–3)	9 (45)
Late (years 4–6)	11 (55)
Ethnicity	
Black	1 (5)
Arab	1 (5)
Asian	7 (35)
Mixed	2 (10)
White	9 (45)
Sexuality	
Asexual	1 (5)
Bisexual	4 (20)
Gay/lesbian	1 (5)
Heterosexual	13 (65)
Other	1 (5)
Mental health issue*	
Anxiety	12 (60)
Bipolar	1 (5)
Burn-out	12 (60)
Depression	14 (70)
Drugs and alcohol misuse	3 (15)
Eating disorders	6 (30)
Insomnia	6 (30)
Personality disorder	2 (10)
Stress	14 (70)

*Students reported experiencing multiple mental health issues, thus the numbers do not total 20 participants.

Patient and public involvement
A steering group met throughout the study which comprised two medical student representatives, in addition to members from Medical Schools Council, Practitioner Health Programme and the British Medical Association. The steering group provided feedback and advice on all aspects of the study including recruitment, development of interview questions, data analysis and dissemination of the research.

Data collection and analysis
The large mixed-methods study, of which this was a part, was conceived prior to the pandemic and had the broader aim of investigating medical students with mental health issues experiences of medical school. The pandemic occurred during the initial stages of this study and we

incorporated an additional aim of exploring the effects of the COVID-19 pandemic. A semistructured interview guide asked open-ended questions about mental health experiences and this study focuses solely on findings related to the pandemic. The interview guide can be found as online supplemental file. Participants were not asked to recall a specific time period during the pandemic but were asked more generally whether they had experienced a mental health issue while at medical school, thus participants were free to tell their story in their own words about their mental health at medical school and whether the pandemic had played a role in their mental health. If unclear from the students' narrative, the interviewer clarified whether students had experienced symptoms for the first-time during pandemic. Three researchers (AR, MS and RV) conducted semistructured interviews using Microsoft Teams during March–June 2021. Interview duration ranged from 35 to 61 min (mean=50 min). The interviews were videorecorded, and the audio was professionally transcribed. The interviews were analysed using reflexive thematic analysis[28 29] by a team of researchers experienced in qualitative analysis (AR, MS and RV) with backgrounds in psychology, linguistics and medical education. Reflexive thematic analysis was chosen as an appropriate method because we wished to undertake an inductive analysis to explore participants' subjective experiences to identify themes across a sample which captured diversity in terms of the characteristics outlined above.[30 31]

Reflexive thematic analysis was also appropriate because we are interested in how personal experiences are located within the broader social-cultural context and to produce results with clear implications for practice.[30 32]

The steps taken for the reflexive thematic analysis can be seen in table 2. To maximise trustworthiness and rigour, we adopted the four criteria outlined by Lincoln and Guba[33] of credibility, dependability, confirmability and transferability. The strategies undertaken to meet the four criteria can be seen in table 3.

RESULTS

Findings were categorised into three primary themes, with subthemes (table 4).

Theme 1: medical schools' response to the pandemic
Increased awareness-raising of mental health support

Prior to the pandemic, students felt that it was unacceptable to have mental health issues because the expectations in medical culture are that doctors must be tough. Students with mental health difficulties often hid their mental health symptoms from others and tried to cope alone. However, during the pandemic, medical schools acknowledged that mental health could be challenging, and took a more proactive stance, reaching out to all students. There were regular communications about the importance of looking after your mental health and an

Table 2	Steps taken for the reflexive thematic analysis
Step 1. Familiarisation with the data	Team members (AR, RV and MS) checked the transcripts against the original audio for accuracy and redacted any identifiable information. This process ensured each member of the team was familiar with the data.
Step 2. Generating initial codes	One transcript was randomly selected, and each researcher read the transcript individually and generated initial codes which were then discussed as a team. This process was repeated for two randomly selected transcripts and a coding framework developed in discussion. Each researcher then coded a subsequent transcript independently using the coding framework. The transcript was then discussed line by line as a team to ensure alignment of coding between team members and resulted in refinement to the coding framework. The remaining interviews were then independently coded using the refined coding framework by the three researchers in NVivo V.12.
Step 3: Searching for themes	Codes were grouped together to form initial themes and a preliminary thematic map was produced.
Step 4: Reviewing themes	Two researchers (AR and RV) reviewed and refined the preliminary themes first by reviewing each of the coded excerpts to check whether they formed a coherent pattern (if not, they were examined to see whether they could be accommodated under an existing theme, form a new theme or be discarded) and then each theme was examined for validity in the context of the entire dataset and to check the accuracy of the preliminary thematic map. This was an iterative process and the thematic map evolved as some codes were discarded and some were integrated with other themes.
Step 5: Defining and naming themes	AR and RV produced a detailed analysis of each theme, identifying subthemes and selecting data extracts. Names of themes were defined and further refined for the final analysis to ensure they were brief but adequately descriptive.
Step 6: Producing the report	The final analysis was written by going beyond a narrative description of each theme, to present an argument of our interpretation of the data in line with our research questions, supported by illustrative quotations following the guidance of Braun and Clarke.[28]

Table 3 Strategies to establish rigour and trustworthiness (adapted from Forero et al[46] Lincoln et al[33])

Criteria	Purpose	Strategies	Description of how the strategies were applied in the current study
Credibility	To establish confidence that the results are true, credible and believable	Interviewer credibility Prolonged engagement External check	Interviewers were selected to have knowledge, skills and experience in qualitative research with expertise in semistructured interviewing and reflexive thematic analysis. Interviewers sought to build trust with participants from outset. Contact began via email and the interview was arranged by the interviewer to begin the process of engaging early with the participant and build rapport. The interview was carefully structured to maximise rapport between participant and interviewer for example, general, soft introductory questions. Prolonged engagement continued into the analysis as researchers immersed themselves by reading transcripts and making notes. A steering group met throughout the research project with key members from the British Medical Association, Medical Skills Council, Practitioner Health Programme as well as Medical Student representation.
Dependability	To ensure the findings of this qualitative inquiry are repeatable if the inquiry occurred within the same cohort of participants, coders and context	Rich description of study methods	Care has been taken to describe the data collection in this report and detailing the steps in the reflexive thematic analysis process (see Table 2). We also kept detailed records (see confirmability—audit trail).
Transferability	To extend the degree to which the results can be generalised or transferred to other contexts or settings	Thick description	Notwithstanding the limitations in description due to journal word count, we hope to have described to the reader in sufficient detail our findings, supported by quotations, to allow them to judge whether the findings would be transferrable to other medical school students.
Confirmability	To extend the confidence that the results would be confirmed or corroborated by other researchers.	Reflexivity Audit trail Triangulation	We held weekly peer debriefing sessions during our period of data collection and met regularly during the period of data coding and analysis to discuss our perspectives and interpretations of the data and provide opportunity for reflection. We have kept detailed organised electronic records of our data collection, analysis process and key decisions made, such as selection of participants and notes about development and hierarchies of concepts and themes. Researcher triangulation. Multiple researchers, from different backgrounds, coded the data, developed the framework and carried out the analysis to minimise bias and draw on multiple perspectives.

acknowledgement that COVID-19 presented challenges to mental health: *'it's fine to struggle because it's Covid'* [Participant 1]. Medical schools encouraged students to access Student Support Services and to place greater emphasis on self-care. Some schools increased resources to students, such as well-being sessions. As a result, awareness of support services was raised:

> I just didn't really know about it [student support services] until I think they started advertising more things online over this past—well like over the pandemic. [Participant 20]

Medical schools' communications with students about mental health sometimes involved senior members of staff. A couple of students mentioned the specific actor involved, which included the Head of Year and the Director of the Medical School:

> I don't know whether it's something to do with the pandemic, but this year there's been a lot more people in high positions, kind of the Head of the Year and things like that saying if you're struggling there are all these resources for people that you can talk to, and you know actively saying that this is a good thing to do, it's not going to hinder your progress

Table 4 Themes and subthemes resulting from the reflexive thematic analysis

Theme	Subthemes
1. Medical schools' response to the pandemic	► Increased awareness-raising of mental health support ► Decreased stigma towards mental health ► Flexibility towards academic requirements
2. Disruption to the medical degree	► Change and uncertainty ► Feeling insufficiently prepared for next career stage
3. Psychological consequences of the pandemic	► Stress and anxiety ► Downward spiral ► Accessing support

in medical school, it's good to get help. In the last year or so I've noticed a big change in that respect. [Participant 17]

But I feel like all the staff have been quite forthright in saying that we can seek support if we want. I was thinking about taking a year out next year and I contacted the medical school and I thought that I would kind of have a receptionist or somebody talk to me, or a counsellor. And the Director of the Medical School booked an appointment and took time out to speak to me. [Participant 10]

The involvement of senior members of staff reinforced its importance and was viewed positively, as was the reassurance that seeking support would not affect their medical career.

Decreased stigma towards mental health

Prepandemic, students with mental health challenges were less willing to confide in others, fearing they may be judged because of the stigma towards those with mental health difficulties. Since the pandemic, it was felt that the increased focus on mental health led to more positive attitudes, which in turn reduced stigma about mental illness.

I just feel like there's been a lot less stigma that I've been aware of, and there are more people in positions of responsibility who are talking about it and kind of promoting it. [Participant 17]

The increased visibility of mental health in both the media and medical school led to an increased readiness in some students to share their difficulties with others.

Flexibility towards academic requirements

Students described how their medical school displayed increased flexibility during the pandemic regarding deadlines, examinations and absences. Medical schools' increased empathy towards students who may be struggling with their mental health was appreciated. This is in marked contrast to prepandemic, where attendance was strictly monitored, and the pressure of examinations was frequently the trigger for worsening mental health symptoms. This influenced their next-stage career choices, prioritising an improved work–life balance:

And I think [Covid] actually helped me to come to the decision to apply for FY1 [see glossary provided as an online supplemental file 2 for an explanation of terms] as a less than full time trainee. [Participant 11]

Participants expressed hope that the pandemic marked a permanent change in medical schools' attitude and support towards students with mental health problems; however, there was concern that when the pandemic was over medical school would revert to being less sympathetic:

But then I'm also concerned that it's going to go back to normal after all of this, like after they deem it to be over. [Participant 8]

Theme 2: disruption to the medical degree
Change and uncertainty

Every part of medical school life was disrupted because of COVID-19, including teaching, examinations and placements. Communication from medical schools about their curriculum and examinations was sometimes experienced as disorganised. Teaching sessions and examinations were sometimes cancelled or rearranged, often at short notice, causing stress:

It is very stressful when you don't know what's coming up in the exams—it's quite like last minute a lot of these things are thrown together. [Participant 20]

This uncertainty around examinations was particularly difficult to deal with for students with mental health issues, because when describing their history of mental health difficulties, the examination period often marked a deterioration in their mental health. However, for some students, the disruption resulted in positives for their mental health. Postponed or cancelled examinations and placements provided respite from the academic requirements of their degree. The reduced pressure allowed them to recharge, and some students reported an improvement in their mental health as a result. The move to solely online learning also provided an opportunity to change location, with some opting to return home:

So 5th year Covid happened, so our placements completely stopped. I kind of enjoyed it because going into university when I was like depressed made things a little worse I guess. So the fact that we didn't have proper exams, we didn't have an OSCE [see glossary provided as an online supplemental file 2 for an explanation of terms], made me a lot better and I was just at home doing nothing, studying a bit—that was pretty good. [Participant 7]

There was also some disappointment that face-to-face teaching was cancelled and frustration that when lockdowns lifted, it did not resume.

Feeling insufficiently prepared for next career stage

Students expressed fears that the learning they had missed due to COVID-19 meant they were ill prepared for future practice as a doctor. Some students felt it would be impossible to catch up:

Like we have so many things to catch up on, and they've just said we're moving it into this week and this week, and it's like well how can we possibly fit all of this in? [Participant 8]

Students with mental health problems frequently mentioned concerns about their ability and suffering from imposter syndrome, thus the cancellations further added to their levels of stress and anxiety. There was frustration about the lack of patient contact, as clinical placements were often cancelled altogether. As a result of their reduced contact with patients, some students felt insufficiently prepared to undertake the next stage of their

medical career. If placements did go ahead they were complicated by safety rules and restrictions, and students felt unprepared to work in this stressful environment:

> Definitely didn't feel ready for placement. I think placement's hard enough without Covid, that's all I'm going to say, especially for third years or people who haven't got much clinical experience. And then put Covid into the equation, the social distancing and masks and you know lots of restrictions about which patients we could see, which wards we were allowed to go to, and then like added stress about PPE, you know no one's been vaccinated. [Participant 12]

The increased workload of National Health Service (NHS) staff impacted the time they had to educate medical students. Students were unable to participate in their normal learning activities, such as watching surgical procedures, because of limitations of numbers in theatre. While medical students understood the pressures staff were under, dealing with a feeling of rejection for approaching staff was challenging and further fuelled the imposter syndrome many students described experiencing.

Theme 3: psychological consequences of the pandemic
Stress and anxiety
Social contact was vastly reduced due to government restrictions, particularly during lockdowns. This caused difficulties sustaining relationships and creating new friendships. As a result, it was harder to find someone to confide in, resulting in many students feeling isolated:

> With Covid I don't have that many close friends, I don't really see them too much, so obviously we're not that close and I'm not really going to tell them you know I've been having a hard day, because we're not that close. [Participant 12]

First year students were particularly vulnerable to social isolation, having not yet had the opportunity to develop a strong social support network, especially those who had moved from overseas. This could lead to a lack of belonging to the medical school.

Medical students described high stress levels from juggling the requirements of their medical degree, additional activities to enhance their CV and employment to support themselves financially. The added complications brought about by COVID-19 elevated these stress levels even higher:

> I was really struggling this year with the pandemic. I needed to get a job so I could just afford to live. I had picked up a responsibility that I really wanted to do and I think would be really good in the future, but it was just a lot of stress on me, and on top of placements and the pandemic it was just a lot at once. I'd never been so just stressed before. [Participant 19]

Anxiety due to COVID-19 itself was widespread, *'I don't know a single person who doesn't have anxiety about Covid'*

[Participant 12], because of the high number of cases and deaths. Monitoring the data closely could become a preoccupation, itself generating increased stress.

Downward spiral
The pandemic's prolonged duration took its toll on students. Their accommodation could compound the situation, for example living in a *'really tiny flat'* [Participant 15] or suddenly living alone as other students returned home. Due to government restrictions students found it difficult to employ the coping strategies that they would normally use, such as hobbies and spending time with friends. Unsurprisingly for many students their mental health deteriorated. Several students' narratives depicted a clear downward spiral resulting in serious consequences, either developing a new mental health condition or exacerbating an existing one. *'Covid … definitely aggravated it'* [Participant 17], as the following quote illustrates:

> I think probably it was just when Covid kind of hit that … it threw a bit of a spanner in the works … with the first lockdown we were all called off placement, and I think in that time I became really depressed again and ended up back in hospital … it was more just I became really really depressed, and I think being isolated … just got really stuck inside my own brain, and just became like super hopeless, ended up becoming really suicidal. And then yeah ended up back in hospital. [Participant 11]

Accessing support
Accessing professional mental health support was more challenging, with students reporting long waiting lists for NHS and university counselling services. Thus, students who sought help often faced delays in speaking to someone. The delay from university services can also undermine the positive steps that universities say they are taking to support students' mental health. One student found that all counselling was cancelled [Participant 20]. However, students already in receipt of professional support continued to receive it, for which they were very grateful:

> Specially during lockdown I'd look forward to that [therapy session] every week. I think my social support was quite narrow at that that time as well, so it was good to have that professional support there. [Participant 10]

DISCUSSION
Statement of findings
The COVID-19 pandemic had a profound effect on medical students with mental health issues experience of medical school. Positively, medical schools responded to the pandemic by increasing communications about mental health and signposting students to relevant

services. The increased visibility and awareness of mental health resulted in less stigma. This has important implications because some students reported not knowing about student support services pre-pandemic and the stigma towards mental health meant many were previously reticent about confiding in others and seeking support. Medical schools adopted a more flexible approach towards academic requirements; in a culture where expectations are high,[34] this increased flexibility was met with relief by students, particularly regarding examinations where many students typically saw an exacerbation of their symptoms. There was hope that these positives would continue postpandemic.

However, there were also negatives. There was notable increased stress and anxiety. There was huge disruption to studies and students worried about being insufficiently equipped for the next stage of training. Students with mental health issues often reported feelings of inadequacy regarding their academic abilities, and thus the disruption compounded these worries with students fearing an inability to catch up. Social restrictions and online learning made developing new friendships challenging. For several students in our sample, the pandemic took a serious toll on their mental health, triggering a new mental health issue or aggravating an existing condition. Furthermore, accessing university and external mental health support services became more challenging.

Comparison with existing literature

To the authors' knowledge, this paper is an original contribution, providing insight into the lived experience of medical students during COVID-19 through in-depth qualitative research, purposefully sampling students with a wide range of mental health issues. A unique and significant finding from this study were the positive changes students felt had occurred because of the pandemic. Our finding that these students welcomed the increased focus on mental health support from medical schools, suggests that medical schools could help students further by continuing this attention postpandemic. There was the perception of reduced stigma towards mental health, which does not appear to have been identified elsewhere. This is an important finding given previous research has identified that medical students with burn-out and depression do not seek help due to fear of stigmatisation, concerns about confidentiality, and feelings of shame and embarrassment.[35–38] It was also apparent that students with mental health issues typically struggled with the rigidity of medical school, with its rules around attendance and deadlines, and very much benefited from the increased flexibility towards academic requirements during the pandemic. This suggests that medical schools could support students with mental health issues by adopting a more flexible approach in non-pandemic times.

We know from previous studies that COVID-19 had a negative impact on medical students' mental health.[16–24] This study adds to this literature by suggesting that students who had experienced mental ill health prior

to the COVID-19 pandemic appeared to be particularly vulnerable to the pandemic reactivating a pre-existing issue or developing another mental health problem. As these students reported difficulties in accessing support from university counselling services, one-to-one support needs to be put in place for students particularly at risk of a downward spiral to their mental health.

Students found the huge change and uncertainty caused by the disruption to their medical education stressful. A survey of over 400 final year medical students from medical schools in the UK found that nearly 40% had their final Objective Structured Clinical Examinations (OSCEs) cancelled.[14] Over 40% had their assistantship placements postponed, while nearly 80% had electives cancelled (see glossary provided as an (online supplemental file 2) for an explanation of terms). Our interviewees found this disruption to their medical education resulted in a lack of confidence and feeling insufficiently prepared for work for the next stage of their medical training. Choi *et al*[14] found nearly 60% of their respondents felt less prepared for FY1 due to the disturbance caused by COVID-19. Similar concerns have been reported in qualitative studies, particularly those students who were allowed to graduate early to help with the response to the pandemic. Studies in both the UK and the USA have found that because of the reduction in opportunities for learning, medical students felt insufficiently prepared for clinical practice, leaving students fearful that they were inadequately trained for their future careers.[39 40] These findings suggest that these students would benefit from additional learning opportunities and support to increase their confidence.

Strengths and weaknesses of the study

Steps were taken to enhance the methodological rigour of the study. Three researchers with differing backgrounds (AR-health psychologist, RV-linguist, MS-health scientist) coded the data and developed the analytical framework, to minimise bias and draw on multiple perspectives. These researchers are experienced in qualitative research and the steps taken in the analysis process have been outlined in detail to demonstrate rigour and transparency (see table 2). Our purposeful sampling technique allowed for the identification and selection of information-rich cases[41] and we achieved diversity by sampling nationally and with a range of sociodemographic characteristics to ensure a range of students' voices were heard to include students with diversity regarding gender, year of study, ethnicity, sexuality and mental health symptom experienced. We demonstrate rigour in our research by providing details of how the research aimed to meet the trustworthiness criteria (see table 3) outlined by Lincoln *et al*,[33] being systematic in our methodology and transparent in our reporting.[42 43]

In terms of limitations, first our interviewees were self-selecting. Due to ethical considerations, students were advised not to participate in an interview if they were acutely unwell, therefore, those who participated

were likely to be coping better at the time of interview compared with others. Second, our sample size is relatively small. However, it is an appropriate size for this qualitative analysis study. Acquiring data saturation was considered unnecessary, as for reflexive thematic analysis it is considered neither particularly useful nor a concept that is theoretically coherent.[44] We drew on the concept of information power (where the more information the sample holds, the lower amount of participants needed) and conducted an in-depth analysis within a homogeneous sample, with a narrow study aim and used experienced interviewers familiar with the subject area.[45]

Implications for practice and suggestions for future research

This study, as with previous research,[14] suggests that the disturbance to medical degrees caused by COVID-19 meant students felt less prepared for the next stage of their career. We agree with the conclusions of Choi *et al*[14] who stated: 'There is a need for robust guidelines on continued educational development for medical students during times of crisis and future pandemics'. We would add that this should include guidance on how best medical schools provide mental health support. Our research suggests medical students with mental health issues would benefit if medical schools continued to keep mental health on their agenda. The changes made during the pandemic, such as providing well-being sessions, and signposting of support services were very much welcomed by students with mental health issues, with the additional benefit that such awareness raising was felt to reduce stigma towards mental health. Such messages were particularly powerful if they were delivered by senior members of staff, such as head of year and director of the medical school and included reassurances that seeking support would not negatively affect their future career.

At the time of writing, COVID-19 has entered the endemic stage and all UK restrictions have ended. However, it is important to remain mindful of the potential longer-term impact on the current cohort of medical students, many of whom have been engaging in predominantly virtual learning since March 2020. The longer-term impact of COVID-19 both among those who continue at medical school and those who qualified during the pandemic is unknown. Future research should also include potential positives, such as whether medical schools have continued with the increased awareness of mental health and exploring perceptions of stigma towards mental health as well the negative aspects.

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