

# COVID-19 pandemic: How have medical students helped the NHS during the crisis

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## Introduction

- Since the novel coronavirus virus (COVID-19) healthcare demands have risen
- Final year students graduated early as interim foundation year 1 doctors (FY1) to support the healthcare sector in the United Kingdom (UK)<sup>(1)</sup>
- We explored the breadth of roles students in the UK have chosen to take up
- Studied the reasons students may have chosen to work in healthcare

## Method

- National, cross-sectional study on students and foundation interim year 1 (FiY1) doctors across the UK via online questionnaire
- Data collected: Age, gender, ethnicity, working in healthcare sector and the types of jobs, sufficient personal protective equipment (PPE) and infection control and prevention (IPC) training

- Anxiety levels measured using with the pandemic anxiety scale (PAS)

- IBM SPSS Statistics for Windows, version 25

## Results

### Demographics

- 25.2% (n=463) of our participants reported working within healthcare
- Roles taken up by students during the pandemic:
  1. Healthcare assistants 38.9%
  2. Full time doctor 15.1%
  3. Administration 4.3%
- Barriers to working in healthcare:
  1. Risk of passing infection to family members 27%
  2. Not enough opportunities 22%

### Variables influencing the probability of working in healthcare

- Black Asian and Minority Ethnic (BAME) participants were less likely to work in healthcare (13.5%) compared to White participants (30.6%), **p<0.001 (Figure 1)**
- Ethnicity remained a significant factor as White participants were **2.1 times more likely** to work compared to participants from BAME backgrounds (92.1 times5% CI OR: 1.5, 2.9), p<0.001
- Receiving sufficient PPE information **increased likelihood 2.5 times** (95% CI OR: 1.9, 3.3) (p<0.001)
- Sufficient IPC training **increased likelihood by 1.4 times** (95% CI OR: 1.0, 1.8) (p<0.001)

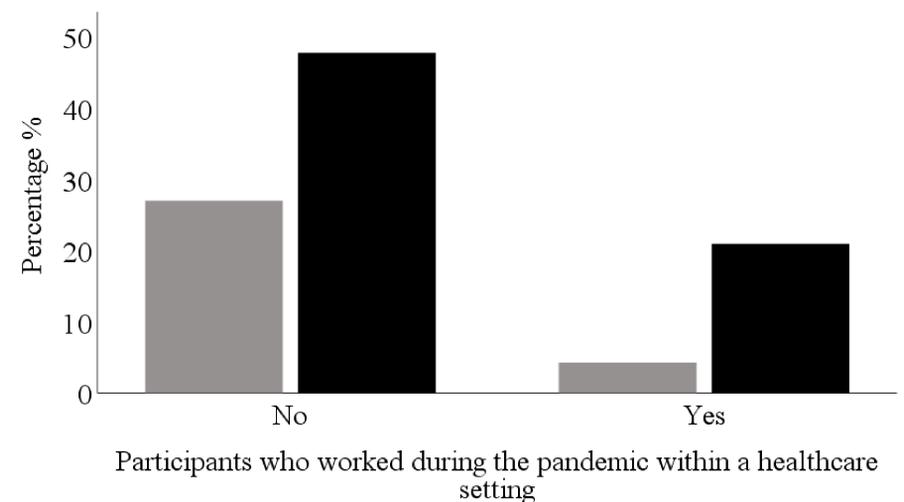


Figure 1: Percentage of participants who worked in healthcare compared to those who did not. The bars coloured grey signify Black Asian and Minority Ethnic (BAME) participants whilst, the bars coloured as black signify

### Effects of ethnicity on PAS Likert Items

PAS Statement	BAME participants	White participants	P value
“I’m afraid to leave the house right now”	median 3.0, IQR 2.0	median 2.0, IQR 2.0	<0.001
“I’m worried about the amount of money we have coming in”	median 3.0, IQR 2.0	median 2.0, IQR, 2.0	<0.001

## Discussion

- Complicated interplay between ethnicity, PPE and IPC training on the decision of participants to start working during the COVID-19 pandemic
- Anxiety and psychological detriment could stem from fear of PPE shortages<sup>(2)</sup>
- BAME respondents were less likely to work in healthcare during the pandemic compared to respondents of white ethnicity
- A probable reason behind these findings is the disproportionate effect that COVID19 has had on the health of BAME communities<sup>(3)</sup>

## Conclusions

- Volunteering and employment opportunities may relieve stress on the NHS and social care systems in the UK
- A national student disaster program should be established within the UK<sup>(4)</sup>
- Universities and local health boards further collaborate to create more opportunities for students in future healthcare pandemics.
- Further support may be required for workers from vulnerable groups like Black Asian and Minority ethnic

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