

# Occupational risk prevention, education and support in black, Asian and ethnic minority health worker in the COVID-19 pandemic

Journal of Patient Safety and Risk Management  
2020, Vol. 25(5) 205–209  
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DOI: 10.1177/2516043520946650  
journals.sagepub.com/home/cpi



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## Abstract

The onset of the COVID-19 in the UK has resulted in an inordinate amount of deaths affecting Black, Asian and Ethnic Minority (BAME) healthcare workers. The occupational risk to this group is thought to be a contributory factor, but other factors include race, genetics, medical co-morbidities, socio-economic status, and access to personal protection equipment. Why COVID-19 appears to be more deadly in BAME members remains unknown, but the UK government is investigating this now. It does appear that certain factors may worsen the disease process in BAME members, but which ones are pertinent to prevention remain to be determined, until a vaccine is available. Thus, the onus should rest on risk prevention, education, and support for all.

Some of the safety strategies that may be instituted to help guide those in the workplace include education, treating potential therapeutic targets and ensuring protection in the working environment. The consideration of a compensation scheme, for families of healthcare workers that have suffered because of COVID-19, would go some way to support the recovery process.

## Keywords

Covid-19, BAME, occupational risk, education

A clear and urgent strategy is required to protect healthcare and supporting staff, who are involved in every aspect of patient care from COVID-19 infection. The Department of Health, Medical Directors, Chief Executives, Directors of Clinical Commissioning Groups, as well as outsourced catering, portering, security and cleaning agencies have an overriding duty to ensure that NHS facilities remain a safe place for staff to work. Hospitals and clinic facilities must not become a vector for transmission. The overriding responsibility lies with the Minister of State.

Atul Gawande published an article in the *New Yorker* magazine entitled 'Keeping the Corona virus from infecting health care workers'.<sup>1</sup> It was written as the pandemic had taken effect in Europe and the United States, but before ethnic risk factors for infection of health care workers were identified. Gawande's summary points are vital in understanding how Wuhan

in China and the rest of the Far East reduced occupational infections.<sup>1</sup>

In the West, we all responded with shocked surprise to the draconian measures, which were imposed in Wuhan. Health care workers were housed separately from their families and worked in full body protective gear. Gawande wrote that Hong Kong and Singapore

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acted swiftly in establishing social distancing and banned large gatherings.<sup>1</sup> All health care workers (HCW) were expected to wear regular masks for all patient interactions, to use gloves and undertake proper hand hygiene. They were also expected to disinfect all surfaces in between patient consultations. Social distancing was practised within clinics and hospitals, and attention was placed to waiting rooms. Direct instructions were given to staff members to conduct all interactions using protective material. The use of personal protection equipment (PPE) was only reserved for aerosol generating procedures (AGP). The also standardised formal contact tracing for all known contacts. To date, Singapore appears not to have had a single recorded health care related transmission of Covid-19. Gawande also stressed the role of proper hand hygiene in achieving this result.<sup>1</sup>

## UK experience

In early March, we were faced in the UK with the ignominy of hand sanitizers being stolen from hospital and clinic premises, masks disappearing from theatres and wards and glove boxes left empty. Furthermore, there was minimal infection risk education provided for the most vulnerable of our non-clinical colleagues, the portering, catering, security, and cleaning staff. We remain unaware what supportive measures were being provided for them. as they were and continue to be at a high occupational risk.

Perhaps the most alarming aspect of COVID-19 infections in the UK, is the high mortality rate amongst Black, Asian and Ethnic Minority (BAME) groups. In a report on BAME health care workers, Cook and co-workers confirmed that there was also a high death rate amongst Filipino staff.<sup>2</sup> In their study, the authors confirmed that there had been 6 deaths of cleaners and porters. They also confirmed that there were no deaths in the highest viral risk group (Intensivists, Anaesthetists, and Critical Care nurses).

It is this sort of data which is vital in setting out interventions on how to prevent infection. It may be as simple as adequate shower and changing facilities, but it is also about training and raising awareness. The NHS was slow to react to the risks of BAME employees. In the initial 6 weeks of the pandemic, the demographics of this infection were clearly very different in the UK than in China.

However, the report by Cook and co-workers means that intervention measures are necessary.<sup>2</sup> Current official figures in the UK show that BAME people make up 44% of NHS medical staff.<sup>3</sup> So, when the mortality amongst the BAME community started to rise, it became imperative to address not only the numbers but the possible causes. NHS England reported

16.2% of COVID 19 deaths up to 17th April involved BAME people, but ethnicity had not been recorded on death certificates. The media, on doing a further analysis reported on 23rd April that 72% of all health and social care staff who died from COVID-19 were BAME, yet they only form 44% of the NHS workforce. The most devastating figure was amongst the medical profession, where the only people who who had died up until 24th April were BAME. These are staggering statistics.

## Factors affecting outcome of COVID-19

Although it is known that age and various low immunity states including cancers all impact on the outcome of someone who is infected by COVID-19, there are other factors that have been mooted as being specific to the BAME community. These include race, ethnicity, genetics, medical co-morbidities, socio-economic status, intergenerational housing, access to PPE and institutional failures.

Race, ethnicity, and genetics remain the most controversial. This may have been relevant if a specific group dominated the mortality figures, but the communities involved are genetically, racially, and ethnically diverse. Within the Afro-Caribbean community hypertensive disorders are predominant, whereas in the South Asian community diabetes and related comorbidities are prevalent. Yet both groups have cohorts who have both disorders present. There are other factors that have been considered, including the haemoglobinopathies, vitamin D deficiency and obesity. Quite clearly, this is a multi-factorial problem. Research is now necessary to understand and manage the issues outlined. This is inevitable first step before viable conclusions can be drawn to help reduce mortality within the BAME community. Simple therapeutic solutions can easily be undertaken to prevent further infection, and to provide better protection within the home and work environment. There also must be compensation for all those families who have lost the principal wage earner.

## Potential therapeutic targets

There are several factors that are thought to adversely impact othe BAME community, but the evidence is not clear. They include hypertensive disorders,<sup>4</sup> vitamin D deficiency,<sup>5</sup> metabolic syndrome<sup>6-9</sup> and haemoglobinopathies, such as sickle cell anaemia and thalassemias.<sup>10,11</sup> Theoretically, optimizing treatment of these conditions may help members of the BAME community respond to Covid-19 infections, though this is by no means proven.

## Protection

General strategies are needed to ensure that in a hospital setting all HCW are protected,<sup>12,13</sup> such as (these measures can also be modified for the home):

- Hospital common areas being deeply cleansed, so that these buildings do not become a vector for transmission.<sup>14</sup>
- All surfaces being cleaned in every facility after any procedure.<sup>14</sup>
- Staff being mandated to wear gowns and masks.<sup>15</sup>
- Staff being mandated to observe rigorous hand hygiene.<sup>16</sup>
- Staff maintaining social distancing, including all clinical meetings, and cleaning of all laptops and keyboards.<sup>14</sup>
- Non-clinical staff, such as porters and cleaners, being provided with appropriate personal protection support.<sup>17</sup>

Staff will have to be carefully screened for risk factors which predispose them to a poor outcome in the event of infection. These will need individual management since some medications, specifically ACE inhibitors, are associated with a poor response to COVID-19 infection.<sup>18–21</sup> It is suggested that Vitamin D supplementation may be a prophylactic measure, particularly for BAME personnel, but this remains unproven. We would also suggest that even non-diabetic staff with the Metabolic Syndrome be offered treatment with Metformin.<sup>22,23</sup> This drug improves insulin resistance which is a known association with eosinopenia, a major predictor of risk in COVID-19,<sup>9</sup> and has been shown to protect against post-infective pulmonary fibrosis.<sup>24</sup>

## NHS compensation scheme (NCS) and pension allocation

The Armed Forces Compensation Scheme (AFCS) compensates for any injury, illness or death which was caused by service on or after 6 April 2005.<sup>25</sup> The government will need to consider a similar scheme for the NHS.

There are 2 main types of AFCS awards: a tax-free lump sum payment for pain and suffering, a Guaranteed Income Payment (GIP) which is a tax free, index linked monthly payment.<sup>25</sup> The Government will need to discuss this with the BMA and Unite to agree a policy for all Health Care Workers who die from occupational exposure to COVID-19. Widows and widowers will also need full spousal pension rights.

This pandemic has taken the world by surprise, but to be COVID ready, we need government engagement to support the NHS and its workers.

## Death investigations

The Health and Safety Executive (HSE) must be notified under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR) when:

- an unintended incident at work has led to someone's possible or actual exposure to COVID-19. This must be reported as a dangerous occurrence.
- a worker has been diagnosed as having COVID-19 and there is reasonable evidence that it was caused by exposure at work. This must be reported as a case of disease.
- a worker dies because of occupational exposure to COVID-19.

Under Regulation 3(1)(a) of the Notification of Deaths Regulations 2019, there must also be a report to a coroner if the doctor certifying the death suspects that the death was due to an injury or disease attributable to employment.

Once reported to a coroner, the death must be investigated, and must usually be the subject of an inquest, if the coroner has 'reason to suspect' that the deceased died of an unnatural death. An ostensibly natural death from COVID-19 may be an unnatural death for these purposes, if culpable human failure contributed to the death, for example failures in the procurement and provision of PPE. The threshold for the coroner to open an investigation is very low, lower than a *prima facie* case, and requiring only grounds for surmise.

In this context, the latest Guidance on COVID-19 deaths and possible exposure in the workplace issued by the Chief Coroner of England & Wales on 28 April 2020 has been widely criticised. This stated that an inquest 'would not be a satisfactory means of deciding whether adequate general policies and arrangements were in place for provision of PPE to healthcare workers in the country or any part of it.' This seems to imply that coroners can sit back and await some later public inquiry.

It is therefore essential that those representing deceased frontline NHS and care home staff urge their local coroners to exercise their individual discretion, as they must, to open investigations into suspected workplace related COVID-19 deaths. Otherwise valuable opportunities to gather evidence and to learn lessons quickly will be lost.

## Summary

The measures outlined in this paper have two main objectives. The first is to stimulate discussion and reflection of the tragic consequences of an unprepared health system on its most vulnerable employees. This has resulted in both severe personal loss to the many individuals and their families, and significant functional loss to the integrity of health care in the NHS. The second objective is to stimulate simple protective measures which may reduce the vulnerability of the BAME population from the ravages of COVID-19. We hope that both objectives will be rapidly considered as the pandemic continues.

## Acknowledgements

Dr Steven Hajiouf, for advice with the manuscript.

## Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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