Feasibility of hygienic clinical attire for doctors during COVID-19: A university hospital experience

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Infection control, nosocomial infection, quality improvement

Personal protective equipment (PPE) for healthcare staff has been central to reducing nosocomial transmission of COVID-19 (Public Health England, 2020: p 6–36). The role of doctors’ clinical attire in transmitting the virus in hospital settings has not been reported in the literature. The survival of SARS-CoV-2 on clothing is currently unknown, but the virus has been shown to remain viable and infectious on surfaces for several days, depending on inoculum shed (Doremalen et al., 2020). Fomite transmission was associated with nosocomial spread and super-spreading events with SARS-CoV-1, and the stability of the two viruses has been demonstrated to be similar (Chen et al., 2004).

In contrast to nursing and allied healthcare staff who have an established uniform policy with evidence-based hygiene measures (NHS England and NHS Improvement, 2020:p2–6), doctors habitually commute to the hospital in work clothing and visit public places en route (Oxtoby, 2015). This is poor infection control practice in ordinary times, but in the context of a pandemic may represent an underappreciated route of viral transmission.

We report the experience of piloting hygienic ‘ward wear’ scrubs for doctors at a large 1000-bed National Health Service University teaching hospital. The hospital employs 1022 doctors, all of whom were offered use of the new scrubs on a loan basis during the first wave of the UK COVID-19 pandemic in March 2020. The provision consisted of three sets of a unisex navy blue poly-cotton scrub suit of standard design, with the hospital logo and ‘doctor’ embroidered on the chest. Doctors were responsible for laundering their own scrubs, as evidence shows that domestic laundering at 60°C is as effective as commercial washing for decontaminating healthcare clothing (NHS England and NHS Improvement, 2020:p2–6). Doctors using the scrubs were instructed to change into and out of them on hospital premises using existing changing room facilities and store their clothing with their personal belongings.

Data was obtained by a web survey with 10 questions in October 2020. Questions included multiple choice, Likert scale questions and free-text. All doctors employed at the hospital (n = 1022) were invited by email to take part. The objectives were to map the demographics of uptake of the ward wear initiative; to obtain feedback on users’ perceptions of hygiene, comfort and professionalism; and to understand the barriers to use among doctors who chose not to take part in the pilot.

Of 1022 doctors, 504 (49%) opted to use the new scrubs. 169 doctors completed the survey (14%). 135 (80%) of respondents were using the new scrubs at the time of the survey, 6 months after the start of the initiative. There was an equal gender split amongst respondents who had tried the scrubs (the ‘uptake’ group) and those who chose not to (the ‘decline’ group). The grade of respondents was comparable between the uptake and decline groups and broadly representative of the proportions of each grade in current employment at the hospital. Of respondents; 50% were consultants, 25% speciality trainees, 15% foundation doctors and 10% staff and associate speciality (SAS) grades.

Within the uptake group (n = 135), 75% said the current pandemic had increased their awareness of the importance of hygienic clinical attire for doctors and 60% intend to continue wearing the scrubs beyond the pandemic. 77% stated willingness to launder the scrubs at home, whereas 23% felt this should be the hospitals’ responsibility. Less than half (40%) felt that doctors should have a mandatory uniform.

The uptake group reported the scrubs were comfortable and professional looking, with mean scores of 7.2 and 8.4, respectively, on a Likert scale of 1–10, where 1 represents ‘not at all’ and 10, ‘extremely’. The trust logo and ‘doctor’ designation was perceived positively, with mean Likert scores of 8.7 and 8.2.

Regarding fit, 67% of female respondents would like a female-specific cut top to be offered, and 30% of respondents
of any gender wanted a wider size range beyond S–XL. 96% reported that the scrubs met their personal modesty requirements.

Of the decliners group (n = 34), the main reasons for not adopting new scrubs were already wearing theatre blues as part of job role (25%); agreement in principle with the initiative but not liking the style, colour or fit of the provision (25%); already bought own scrubs (15%) and preferring to wear own clothes for work (15%). When asked what would encourage the decliners to start wearing the ward wear attire, 38% would like their grade and 31% would like their speciality embroidered on as they felt ‘doctor’ was descriptively inadequate. 35% would use them if the hospital was responsible for laundry, 25% would use them if there was a wider size range and 15% would if there was a choice of style.

In summary, doctors clothing may be an unappreciated route of transmission of SARS-CoV-2 virus and introduction of hygienic, hospital-provided ward wear may serve in part of mitigate this risk. In this pilot study, we have demonstrated that it is acceptable to doctors to wear and self-launder hygienic ward wear in a university hospital setting and it is feasible for them to comply with on-site changing requirements without provision of any extra facilities. We have identified the main barriers to uptake, which other hospitals may wish to consider when implementing a similar initiative.

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