

BMJ Open 'I decided not to go into surgery due to dress code': a cross-sectional study within the UK investigating experiences of female Muslim medical health professionals on bare below the elbows (BBE) policy and wearing headscarves (hijabs) in theatre

Abida Malik,^{1,2} Hafsa Qureshi,³ Humayra Abdul-Razakq,⁴ Zahra Yaqoob,⁵ Fatima Zahra Javaid,⁶ Faatima Esmail,⁷ Emma Wiley,⁸ Asam Latif⁹

To cite: Malik A, Qureshi H, Abdul-Razakq H, et al. 'I decided not to go into surgery due to dress code': a cross-sectional study within the UK investigating experiences of female Muslim medical health professionals on bare below the elbows (BBE) policy and wearing headscarves (hijabs) in theatre. *BMJ Open* 2019;9:e019954. doi:10.1136/bmjopen-2017-019954

► Prepublication history for this paper is available online. To view these files, please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2017-019954>).

Received 11 October 2017
Revised 16 October 2018
Accepted 20 December 2018



© Author(s) (or their employer(s)) 2019. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

For numbered affiliations see end of article.

Correspondence to

Dr Abida Malik;
abida.malik@nottingham.ac.uk

ABSTRACT

Objectives The objective of this study is to explore the impact of workplace dress code policies and guidance that may influence inclusivity and opportunities in the workplace.

Design Quantitative, self-completion cross-sectional survey.

Setting British Islamic Medical Association conference.

Participants Eighty-four female medical healthcare professionals with a range of ethnicities and wide geographical coverage.

Primary and secondary outcome measures The study reports on the experiences of female Muslim healthcare professions wearing the headscarf in theatre and their views of the bare below the elbows (BBE) policy. Percentage of positive answers and their respective 95% CIs are calculated.

Results The majority of participants agreed that wearing the headscarf was important for themselves and their religious beliefs (94.1%), yet over half (51.5%) experienced problems trying to wear a headscarf in theatre; some women felt embarrassed (23.4%), anxious (37.1%) and bullied (36.5%). A variety of different methods in head covering in operating theatres were identified. The majority of respondents (56.3%) felt their religious requirement to cover their arms was not respected by their trust, with nearly three-quarters (74.1%) of respondents not happy with their trust's BBE uniform policy alternative. Dissatisfaction with the current practice of headscarves in theatre and BBE policy was highlighted, with some respondents preferring to specialise as GPs rather than in hospital medicine because of dress code matters. The hijab prototype proposed by the research team also received a positive response (98.7%).

Conclusions Our study suggests that female Muslims working in the National Health Service (NHS) reported experiencing challenges when wearing the headscarf in theatre and with BBE policy. The NHS needs to make its position clear to avoid variations in individual trust

Strengths and limitations of this study

- The diversity of our sample which included healthcare professionals from across the country and at a range of grades and specialties. The data suggest that these concerns are not limited to a single geographical area or clinical specialty. Our sample matched the demographic of interest, namely Muslim women who wear headscarf and would normally cover their forearms for religious reasons.
- Since the questions were not specific to a specialty, it related to anyone with experience working in theatre and hospital wards. Thus, the findings can be applied to Muslim female healthcare workers, who adhere to a specific religious attire and are working in health-based settings. This is a nuanced study that investigates the proportion of female medical healthcare professionals who wear a headscarf in the National Health Service, their experiences of wearing the headscarf in the workplace and of the bare below the elbows policy.
- By accessing respondents in a national 'Muslim women in healthcare' conference, this study was able to reach a population whose experiences have rarely been explored in published research before.

interpretation of dress code policies. This illustrates a wider issue of how policies can be at odds with personal beliefs which may contribute to a reduction in workforce diversity.

INTRODUCTION

New National Health Service (NHS) leadership models centred on 'compassionate leadership' encourages wider representation at senior levels as this may improve

Strengths and limitations of this study

- ▶ The sample was opportunistic and relatively small. Where participants did not reply to certain questions, it was not known if this is because they overlooked the question, did not know the answer or were uninterested in completing it. Follow-up questions would have allowed to explore some of their experiences in more detail and further the analysis. Most of the respondents (93.9%) ordinarily wore the headscarf out of work, so we are unable to comment on whether our findings and conclusions apply to those Muslim women who do not ordinarily wear the headscarf in their everyday life. Sampling from a Muslim healthcare workers conference may over-represent those who have experienced challenges, yet it represented a much more accessible means of reaching the target group than hospital visits or recruitment at other events, which also may have brought other such biases. The questionnaire used was not a validated instrument. It is unknown how accurate this tool captured views and experiences.
- ▶ This is a correlation research survey using a cross-sectional design that used self-reports and so the conclusions drawn should be viewed with caution. Over a third of respondents (36.5%) felt bullied while wearing the headscarf in theatre. Unfortunately, we did not explore if this bullying has subsequently extended outside the theatre, the effect on participants, coping mechanisms, reporting or line manager responses to reporting. Further qualitative work is recommended in the future to expand on this.

patient safety and better productivity/innovation.¹ However, religious minority groups in the workplace may experience significant barriers due to work codes conflicting with closely held religious beliefs. In 2017, the Court of Justice of the European Union ruled that the prohibition of the visible wearing of any political, philosophical or religious sign does not constitute direct discrimination.² By positing that preventing the wearing of an Islamic headscarf does not constitute prejudice, the Court has further brought into question the limits of religious freedom and human rights. How do these rules manifest within countries observing secularisation? The decision comes at a time when the role of Islam in public life is under scrutiny within sociopolitical discourse. Media have reported narratives which discuss the banning Muslim religious attire in certain settings.^{3 4} These events, alongside broader concerns such as Brexit, have led to reports of minority communities in the workplace feeling progressively marginalised.⁵ Muslim women appear to be particularly affected and under-represented in the workplace, with only 29% being employed compared with approximately half of the wider female population.⁶ Research indicates that there are 'penalties' for Muslim females regarding economic activity; a significant contributing factor could include the custom of wearing a hijab (head covering).⁷ For many Muslim women, the headscarf is more than a personal choice, but rather a religious observance that has its origins in the Qur'an 24:31 (Islamic religious scripture). Most Muslim scholars agree that the hijab must cover the head and chest.⁸ For many Muslim women, the headscarf often symbolises their devotion

to their religion with the intent to portray modesty. In practice, it forms part of a wider dress code intended to cover the whole body besides the hands and face.⁸

Given the importance that many female Muslims attach to the headscarf,⁹ there is currently no nationally agreed NHS dress code policy that addresses the wearing of the headscarf on wards or in theatres, but rather, local bespoke guidance is offered by trusts.¹⁰⁻¹⁷ Some trusts appear to allow the observance of the hijab always but with certain restrictions.¹⁰⁻¹³ While some trusts prohibit their staff from wearing a hijab within operating theatres completely,¹⁸ others fail to mention the garment at all.¹⁵⁻¹⁷ The disparity in guidance has been shown to cause uncertainty, which is particularly evident to medical students or professionals starting at a new hospital.¹⁹ NHS employers' position appears to advocate careful consideration of religious beliefs and to avoid discrimination for those who wear the headscarf.²⁰ However, there is little evidence on how this is presently managed in practice. The need to investigate the experiences of Muslim women in the NHS and the influence religious beliefs have on career progression is therefore timely (although a snapshot view).

In addition to the headscarf, for many female Muslims working in the NHS is the 'bare below the elbows' (BBE) policy is of great significance.²¹ This policy initiative is designed to further encourage good hygiene through hand and wrist washing. In short, the policy excludes the wearing of white coats or outer garment that have cuffs, and that shirtsleeves must be rolled up, that can in theory become contaminated, increasing risk to patients. Despite there being limited evidence that being bare below the elbows reduces the spread of infection,^{22 23} updated National Institute for Health and Clinical Excellence guidelines²⁴ for infection control, recommends healthcare workers should adopt this strategy when in direct contact with patients.²⁵ In fact, one key article identified that 'the NLH Library and the TRIP and Medline databases found no guidelines or studies in support of clinical healthcare staff adopting BBE policy'.²⁶ Furthermore, within the Department of Health's (DoH) working group on uniforms and laundry, it is demonstrated that 'there is no conclusive evidence that uniforms (or work clothes) pose a significant hazard in terms of spreading infection'.²¹ However, there has been little ongoing consultation with female Muslim professionals who, analogous to the issue of the hijab, see the BBE policy at odds with personally held religious views around maintaining modesty.²⁷ Given trust policies attempt to support diversity and aim to further recruit people from ethnic minority backgrounds,^{25 28} there is little research into how employment policies impact on Muslim women working within the NHS, or any other religious group. This shows a need to research policies and their impact on religious minorities so that informed policies can be developed founded on evidence-based research.

"I have avoided theatres due to this issue"-58

"The barrier of being able to wear my hijab in theatre across the UK"-59

"I will avoid surgical specialities"-64

"Wanted to do obs&gynae but dress code is not appropriate"-73

"I decided not to go in to Surgery due to dress code" -75

"I am very interested in surgery. If by working in theatre means that I can't happily practice my religion, then I don't know. I might consider something else"-82

"At times it's made me avoid theatre but surgery is my dream so I just found a way around it- some staff don't make it easy though"-90

Figure 1 Excerpt of free-text comments left by respondents regarding the impact their experiences with headscarves in theatre have had on their career choice.

METHODS

Study design

A quantitative, correlation research survey using a cross-sectional design was chosen as an appropriate way (regarding both time and cost) of obtaining data on the specific sample. Additionally, it could be easily distributed to participants at a conference aimed at Muslim women in healthcare. A 28-item quantitative self-completion questionnaire was developed by the study team following a review of the literature. Views of its appropriateness to capture opinions were also sought from the British Islamic Medical Association (BIMA) executive committee. The questionnaire sought to collect demographic information, experiences of wearing the headscarf in operating theatres and participant views on the BBE policy (figures 1–3).

Patient and public involvement statement

No patients were not involved in this particular study.

The questionnaire was piloted on five female Muslim medical professionals who were personal contacts. It was explained that the pilot sought to ascertain how long it would take to complete the questionnaire, whether the questions were understood in the way that was intended, and to allow for any adjustments to be made to the

"Subject to be criticised by anyone in theatre!"-3

"Questioned"- 15

"Due to the type of hijab given-embarrassed" - 31

"Self conscious"-57

"Special"- 60

"Like I am doing wrong and affecting sterility"-61

"Guilty/Sinful"-62

"Harshly spoken to"-64

"Respected"-83

Figure 2 Excerpt of free-text comments left by respondents regarding how they felt when trying to wear the headscarf in theatre.

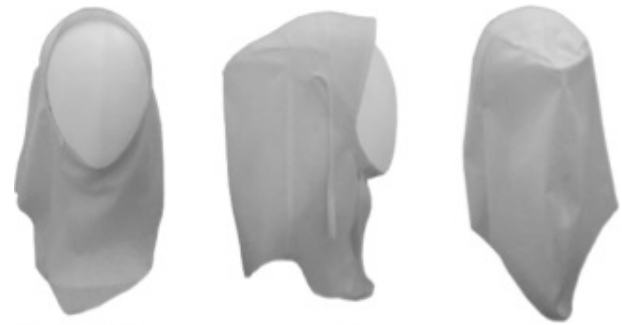


Figure 3 Theatre hijab prototype.

questions to improve readability. Following minor adjustments to the wording and structure, face validity was undertaken by a final review by the study team and by the conference organising committee.

Primary research objectives

- ▶ To estimate the proportion of Muslim women healthcare professionals who may feel it is important for them to wear a headscarf in theatre and what challenges they have faced with this.
- ▶ To estimate the proportion who have experienced problems with observing the hijab in their daily work practice and of the BBE policy.

Secondary research objectives

- ▶ To ascertain whether a disposable theatre hijab would be an acceptable head covering in theatre for female healthcare professionals who ordinarily wear a headscarf.

Setting

Data were collected at the second 'Muslim Women Excelling in Islam and Medicine' conference organised by BIMA held at the University of Nottingham Medical School in March 2016. BIMA is an independent not-for-profit national organisation that aims to 'unite, inspire and serve' Muslim healthcare professionals in the UK, particularly those working in the NHS. The conference was advertised primarily at practising medical doctors but extended to medical students and other healthcare professionals across the country (UK). Advertisement of the conference was available on the BIMA website and emailed to members, and promoted through social media and via professional contacts. Consent was assumed from those who filled in the questionnaire. This acceptance consent is practised in research. In addition, although there was no written informed consent statement for participants to complete, a presentation informing the participants of the research was delivered.

Sample size calculation

Using nQuery Advisor (V.6.01, nQuery Statistical Solution, USA), we computed that a sample size of approximately 80 participants would provide sufficient precision (width of CI 10% either side) for our estimates of the proportion of female Muslim medical health professionals. These

consisted of those who agreed or strongly agreed that it was important for them based on their religious beliefs to be able to wear a headscarf in theatre and cover their forearms wherever possible, assuming that the proportion was 0.7 or higher. The sample size was based on a precision of our proportions (ie, width of 95% CI), not power (as no statistical tests or measures of association were computed).

Distribution of the survey

The questionnaires were distributed during a plenary session. A short presentation was made explaining the aims of the study and information sheets (same as what was included in the presentation) about the study were available on request. To allow maximum uptake, the questionnaire was also available throughout the duration of the conference at stands and at the registration desk. There were 100 potentially eligible female Muslim health professionals for survey completion.

Our target population were female Muslim medical health professionals that worked in the NHS. This inclusion criterion was determined by the research team. It was based on conference attendees, for instance, Muslim medical/healthcare professionals around the UK. The inclusion criteria were therefore: one, being a Muslim woman and two, working in the NHS as a medical healthcare professional. There were no reports of any individual declining to take part in the study. We decided to look at a group of Muslim professional women holistically, the commonality being that they ascribed to the faith of Islam. This group is heterogeneous in terms of identities, ethnicities, sects, that is, Shia and Sunni (and further within Sunni's four main variations of jurisprudence),²⁹ which makes our sample as diverse as possible. We remained preoccupied with understanding the macro and common concerns of the group. Thus, these data were not collected. We do acknowledge the diversity within the grouping and thus did not presuppose a homogeneity of these respondents but rather were keen to identify patterns based on their commonalities they embodied.

Analysis plan

Data were inputted into SPSS Statistics V.23 (IBM, Armonk, New York, USA) and any free-text responses thematically categorised into groups for analysis. Following data entry and cleaning by H-AR, 20% of the questionnaires were checked for accuracy by two other members of the research team. The demographics were then summarised using frequencies and proportions of the categorical variables. The only continuous variable was age, which was not normally distributed and was therefore contextualised using the median and range.

The distribution of each variable was summarised by computing the frequency and percentage of responses in each category. The proportion of 95% CIs was computed around the proportion responding positively to the question asked.

Ethical considerations

This was an optional self-completion questionnaire and there were few ethical issues that arose. Completion of the questionnaire was taken as implied consent to participate in this study. Following enquiries with the Health Research Authority (HRA), we were informed that HRA or ethics approval was not deemed necessary, and that approval from the BIMA conference organising committee was all that was required. All questionnaires were deidentified, labelled with a unique identifier and confidentiality maintained. Subjects were provided a unique identifier by a person not involved in survey administration. No participant names and identifiers were collected, although surveys were kept in a secure location. Patient and public were not involved in this study.

RESULTS

Demographic profile of respondents

A total of 100 females were registered at the conference, with 85 questionnaires returned and 1 deemed to be invalid (response rate 84.0%). An adequate response rate was defined as 60%. **Table 1** shows the characteristics of participants. A complete survey was defined as anything more than the demographic profiles of participants being completed, anything less was deemed as partial completion.

The median age of respondents was reported to be 26.5 years (range 18.0–56.0 years), with most respondents being Asian/Asian British (61.9%). There were varying ethnicities of respondents. However, the reason for 0% white respondents is not known, possibly because of our small sample size and the fact that only 2.7% of British Muslims are white according to 2011 census data.⁶ Most respondents reported they worked in the East Midlands (27.4%) and London (21.4%). The highest proportion of respondents were core trainees/GPVTs/SHOs, making up 23% of respondents. Other healthcare professions participated, included GPs, consultants, pharmacists and operating department practitioners (12.2%). Specialties included dermatology, ophthalmology, dentistry, gastroenterology, psychiatry, pharmacy and clinical sciences.

Experiences of the surgical hijab in theatre

The substantial portion of the questionnaire focused on respondent's views and experiences of wearing the headscarf in theatre (**table 2**). A high proportion (93.9%) of participants reportedly wore the headscarf outside their workplace environment, with most participants (94.1%) strongly agreeing that wearing the headscarf was important for themselves and their religious beliefs. Only 40.7% of respondents were aware of their trust having a uniform policy specifically for wearing a headscarf in the operating theatre. When respondents were asked whether their 'religious requirements were met by their trust', 54.3% reported their trust was meeting their religious requirements, however only 24 out of 84 (28.6%) of respondents had chosen to answer this question, possibly

Table 1 Demographic profiles of participants

Variable	n=85 (%) (unless otherwise stated)
Q1. Median age of respondents (range)	18–56 years Median: 26.5 years
Q2. Ethnic group	
Asian/Asian British	52 (61.9)
Arab	14 (16.7)
Black/Black British	6 (7.1)
Malay	3 (3.6)
White	0 (0)
Other	9 (10.7)
Total	84 (100)
Q3. Geographical place of work	
East Midlands	23 (27.4)
London	18 (21.4)
North West	14 (16.7)
Yorkshire and the Humber	11 (13.1)
Wales	2 (2.4)
West Midlands	7 (8.3)
East Anglia	3 (3.6)
North East	1 (1.2)
Other	5 (6.0)
Total	84 (100)
Q4. Occupational role	
Core trainee/General Practice Vocational Training Scheme (GPVTS)/Senior House Officer (SHO)	20 (24.4)
Medical student (started clinical attachment)	14 (17.1)
Medical student (yet to start clinical attachment)	5 (6.1)
Foundation doctor	14 (17.1)
Specialty trainee/specialist registrar	6 (7.3)
Trust doctor	5 (6.1)
Consultant	4 (4.9)
General practitioner	4 (4.9)
Other student	6 (7.3)
Associate specialist	2 (2.4)
Pharmacist	1 (1.2)
Operating department practitioner	1 (1.2)
Total	82 (100)
Q5. Work speciality	
Medical student	18 (22.2)
Medicine	15 (18.5)
General practice	15 (18.5)
Surgery	9 (11.1)
Paediatrics	4 (4.9)

Continued

Table 1 Continued

Variable	n=85 (%) (unless otherwise stated)
Anaesthetist/intensive care	3 (3.7)
Emergency medicine	3 (3.7)
Obstetrics/gynaecology	2 (2.5)
Other	12 (14.8)
Total	81 (100)

because people were not aware of their trust uniform policy.

When respondents were asked whether they ‘were happy with their trust’s uniform policy’, again a substantial proportion chose not to answer (22 out of 84; 26.2%). We do not know the reason for this, but it is likely to be due to people not being familiar with their trust’s uniform policy. Of the respondents who did respond, 54.6% were happy with their trust’s uniform policy. Forty-seven out of 84 respondents, 55.95% felt their religious requirements were respected by their theatre managers.

The most common method many of the Muslim females used for head covering in theatre were wearing the same headscarf outside of theatre covered with a theatre cap (28.6%). A further 8.6% of women again wore the same headscarf outside of theatre, but without the theatre cap. Further analysis revealed that 96.9% of the respondents that were able to wear the same headscarf they wore outside of theatre, in theatre, had felt that this met their religious requirements. Twenty per cent of Muslim female healthcare professionals reported having to remove their headscarf completely and exchanging for a theatre cap alone. Of those respondents that exchanged their headscarf for a theatre cap alone, 80.6% felt their religious requirements for head covering were not being met. It was found that 31.5% of respondents were not happy with their methods of head covering within theatre.

Over half (51.5%) of respondents had experienced problems when trying to wear the headscarf in theatre. Situations included: being questioned several times, having no orthopaedic hoods available and even resulting in not going into theatre. It was found that 31.5% of respondents had avoided attending theatre because of concerns related to wearing a headscarf. Under 14.3% of respondents expressed their experiences had impacted their career choice, stating a general theme of avoiding theatre/surgical specialties completely, even if they did have an initial interest. However, we did not collect data on which career they chose instead or ask if they were happier in this career. [Figure 1](#) shows the comments respondents made on the questionnaires, which confirm barriers faced by some of the Muslim women pursuing careers in surgical (or theatre) environments, that is, anaesthetics and scrub nurses.

Most respondents agreed that when wearing a headscarf in theatre they felt accepted (57.6%), content (68.8%)

Table 2 Table of results showing experiences of wearing the headscarf

Variable	Total number (N)	Missing data (N)	Sample proportion (%)	95% CI
Q6. Wear headscarf	82	3	77 (93.90)	88.72 to 99.08
Q7. Agreement that wearing headscarf is important to religious beliefs	84	1	79 (94.05)	88.99 to 99.11
Q8. Trust holds a theatre headscarf policy	32	53	13 (40.66)	23.64 to 57.68
Q9. Religious requirements met by the policy	24	61	13 (54.17)	34.24 to 74.10
Q10. Respondent happy with the policy	22	63	12 (54.55)	33.75 to 75.35
Q11. Religious requirements respected by the theatre manager	47	38	43 (91.49)	83.51 to 99.47
Q12. Method of head covering	70	15		
I. Exchange headscarf for theatre cap			14 (20.00)	10.63 to 29.37
II. Orthopaedic hood provided by hospital			15 (21.43)	11.82 to 31.04
III. Theatre headscarves provided by hospital disposable			7 (10.00)	2.97 to 17.03
IV. Theatre headscarves provided by hospital reusable			1 (1.43)	0.00 to 4.21
V. Wear the same headscarf I wear outside of theatre			6 (8.57)	2.01 to 15.13
VI. Same headscarf covered with theatre cap			20 (28.57)	17.99 to 39.15
VII. Change into reusable headscarf I bring			7 (10.00)	2.97 to 17.03
VIII. Change into reusable headscarf I bring and cover with theatre cap			15 (21.43)	11.82 to 31.04
IX. Change into own disposable theatre headscarves			1 (1.43)	0.00 to 4.21
Q13. Religious requirements are not met by the method of head covering	72	13	58 (80.56)	71.42 to 89.70
Q14. Respondent is happy with method of head covering	73	12	50 (68.49)	57.84 to 79.14
Q15. Experienced problems when trying to wear a headscarf	66	19	34 (51.52)	39.47 to 63.57
Q16. Avoided theatre because of concerns	73	12	23 (31.51)	20.86 to 42.16
Q17. Impact on career choice	70	15	10 (14.29)	6.09 to 22.49
Q18. Emotions felt when wearing headscarf				
Accepted	66	19	38 (57.58)	45.66 to 69.50
Content	64	21	44 (68.75)	57.40 to 80.10
Positive	62	23	37 (59.68)	47.47 to 71.89
Indifferent	60	25	14 (23.34)	12.64 to 34.04
Embarrassed	64	21	15 (23.43)	13.06 to 33.80
Anxious	62	23	23 (37.10)	25.08 to 49.12
Bullied	63	22	23 (36.51)	24.62 to 48.40
Consider wearing an alternative	78	7	77 (98.72)	96.23 to 101.21

and positive (59.7%). Negative feelings included respondents feeling embarrassed (23.4%) and anxious (37.1%) when in theatre. Over a third of respondents (36.5%) felt bullied while wearing the headscarf in theatre. [Figure 2](#) shows the other emotions respondents felt, which further supports the difficulties some of the Muslim women faced when trying to wear the headscarf in theatre.

Hijab prototype

When respondents were offered an image of an alternative disposable headscarf that could be worn in the operating theatre environment ([figure 3](#)), 98.7% of participants had expressed they would consider wearing the garment, if made available by their trust. While 17.2% would only

consider an alternative if certain requirements were met such as the garment such as being long enough to cover neck and chest area; comfortable, opaque and ensuring a secure fit.

Bare below the elbows

The latter part of the questionnaire focused on respondent's views and experiences of the BBE policy at their trust ([table 3](#)). Most participants (82.7%) usually cover their forearms for religious reasons outside of work. We found that three-quarters (74.7%) of participants either strongly agreed or agreed that keeping their forearms covered was a matter of religious importance. A high proportion of the respondents were BBE in wards only

Table 3 Table of results showing experiences of bare below the elbows (BBE) policy

Variable	Total number (N)	Missing data (N)	Sample proportion (%)	95% CI
Q20. Usually cover forearms for religious reasons	81	4	67 (82.72)	74.49 to 90.95
Q21. Agreement that it is important to cover forearms because of religious beliefs	79	6	59 (74.68)	65.09 to 84.27
Q22. Respondents' BBE practice	77	8		
I. I am BBE at all times in hospital			19 (24.68)	15.05 to 34.31
II. I am BBE in wards only			46 (59.74)	48.79 to 70.69
III. I wear disposable sleeves (my own)			3 (3.90)	0.00 to 8.22
IV. I wear disposable sleeves (supplied to me)			0 (0.00)	0.00 to 0.00
V. Other			9 (11.69)	4.52 to 18.86
Q23. Trust suggest an alternative BBE rule in light of religious beliefs	41	44	3 (7.32)	0.00 to 15.29
Q24. Religious requirements met by the alternative	17	68	3 (17.65)	0.00 to 35.77
Q25. Respondent happy with alternative	27	58	7 (25.93)	9.4 to 42.46
Q26. Religious requirement respected by trust	48	37	21 (43.75)	29.72 to 57.78
Q27. Experience of BBE influenced career	68	17	11 (16.18)	7.43 to 24.93
Q28. Experience of BBE influenced place of work	68	17	6 (8.82)	2.08 to 15.56

(59.7%), with just one respondent recognising that BBE was only necessary during direct patient contact. A small proportion (3.9%) wore disposable sleeves of their own.

When participants were asked whether they were aware of any alternative rules for BBE at their trust, the majority (92.7%) were not aware of any alternatives for BBE existing at their trust with 82.4% reporting their religious requirements were not met by their trust's BBE uniform policy alternative. Nearly three-quarters (74.1%) of respondents were not happy with their trust's BBE uniform policy alternative. Participants expressed concerns of being unable to cover forearms in clinical areas, wanting disposable sleeves, the impracticality of changing disposable sleeves between patients, colleagues being unaware of the issue, having multiple arguments and being referred to the medical director. Over half of the respondents (56.3%) felt that their religious requirement to cover their arms was not respected by their trust.

"Been scolded by theatre staff, puts me off going to surgery"-1

"I feel really uncomfortable as I was not allowed to cover my forearm"-6

"Not yet because I haven't chosen a career, but I do think I will avoid certain careers in the future because of this"-9

"Always aggressively/rudely challenged"-41

"Prefer GP as less restrictive with BBE"-44

"Some resistances on occasions causing friction - was a factor in my decision"-48

"Want to do GP instead of hospital medicine so I can cover"-73

"I have decided to train as GP so I can wear my Islamic clothes with no concerns"-75

Figure 4 Excerpt of free-text comments left by respondents regarding the impact of their experiences with 'bare below the elbows (BBE)' policy has had on their career choice.

A further 16.2% of respondents felt that the BBE policy had an impact on their career choice. **Figure 4** shows the comments collated, which expresses a theme of dissatisfaction with the current practice of BBE policy and some respondents preferring to specialise as a GP rather than hospital medicine. A high proportion of respondents (91.2%) felt their experience with BBE had no impact on their choice of hospital or trust. However, some comments from the respondents included: certain trusts being more accepting, being nervous working at a trust or ward for fear of humiliation and even completely avoiding trusts that have had problems with the BBE policy.

DISCUSSION

There is increasing evidence that a diverse workforce contributes to good patient care²⁸ and that discrimination against staff is strongly linked to poorer patient outcomes.³⁰ Hence, an inclusive and representative NHS Trust Board is also more likely to benefit the communities it serves.^{27 31} Unfortunately, recent research demonstrates that very little progress has been made in the past 20 years to address the issue of discrimination against black, Asian, minority and ethnic staff in the NHS.^{32 33} People from varying religions, working within the NHS have reported discrimination based on faith but evidence suggests the highest are among Muslims even when other factors are controlled.³³

Surgical institutions have been keen to tackle the issue of under-representation of women in surgery³⁴ and others have raised concerns over recruitment processes, which reveal disproportionately white applicants in leadership positions within the NHS.³⁵ However, in medicine, there

is already considerable evidence to suggest that people from minority ethnic groups are discriminated against during stages of their medical careers.³⁶ This can appear as early in the educational setting,^{37 38} through to various forms of abuse, harassment and bullying in workplace environments.^{39–43}

There have been few previous studies that have specifically explored the experiences of diverse Muslim women working in the NHS. This is a pioneering study which collects data on the experiences of Muslim healthcare professionals who chose to wear hijab in theatre and have diverging views on the BBE policy. Most respondents felt their trust respected their religious obligations, in practice half experienced problems with the headscarf including feeling anxious, embarrassed and bullied. One-third of participants were unhappy with their method of head covering and over half had to make their own provisions for a head covering. Strategies to avoid compromising on religious belief and deter negative feelings included evading attending theatre and choosing not to pursue a surgical career. Other findings indicated that some Muslim women considered leaving their post over these issues. Orthopaedic hoods, which have been described as 'hijab substitutes' were not perceived as a viable alternative. Another significant finding was the breadth of experiences and variation in head coverings that women had used, indicating a lack of consistency in what was allowed by their theatre manager. This suggests a need for regulation across trusts and greater clarity to prevent women being asked to remove their headscarf 'on the spot', possibly leading to those feelings of anxiety, embarrassment and feelings of being bullied.

There is Department of Health guidance²⁴ on faith exemptions to BBE policy, however the very high number of respondents who were unaware of alternatives to BBE rule at their trust (92.7%) is noteworthy. A national audit conducted by BIMA⁴³ demonstrated that only 9 out of 33 (30%) trusts had incorporated this national guidance into their local dress code policies. This may explain some of the lack of awareness at HCP level, however it is possible that even where trusts have clear local guidance the message may not be reaching affected staff, and this may further contribute to a sense of isolation and challenge. BIMA has produced toolkits for female healthcare professionals to raise awareness of existing national BBE policy, launched these at their national conference, via webinar and via social media networks. NHS Employers also held a national roundtable in response to these findings and has made some recommendations which will include national awareness raising campaigns. It remains unclear whether education alone will enable the necessary change. A multilevel, multipronged British strategy may be required.

As the standards of theatre and uniform policy tend to be similar in Western countries, it may be possible to apply the results of this study to other examples. In addition, explore the practices in other majority Muslim-based countries in which healthcare professionals

observe the headscarf. Thus, it would be beneficial for an international survey incorporating current workplace policies regarding uniform work wear in hospitals and theatre, and employee satisfaction to further enhance the external validity of our results.

In traditional Muslim countries, it seems a variety of long-sleeved clothing is employed from overcoats and undersleeves to long-sleeved scrubs or tunics. More specifically, Malaysia addresses a need for enhancing doctor-patient relationship and so dressing modestly is their paramount interest.⁴⁴ Furthermore, a recent article by Markel *et al.*⁴⁵ identified that the use of long sleeves and gloves decreased particulate and microbial shedding in several of the operating rooms tested. This suggests a possible counterargument to the current BBE policy.

Implications

Research suggests tackling discrimination and promoting diversity requires 'multilevel, multistrategy, mutually reinforcing action'.²⁷ Research from a range of contexts indicate that mandated policy interventions to promote diversity that have legal or funding consequences are associated with better outcomes than non-mandated policies.^{27 31} Considering the findings from this study, it would be prudent for trusts to review their theatre uniform policies to ensure these are both clear, non-discriminatory and are sensitive to the religious needs of Muslim women, and there is consistency in their enforcement.

It is beyond the scope of this paper to review the effectiveness of the BBE policy and whether this should be maintained considering the lack of evidence. However, there should be more awareness of the Department of Health uniforms guidance (2010) on this issue suggesting disposable oversleeves as an alternative to BBE.²⁴ Oversleeves are a viable option that Muslim women may not be aware of. Those trusts that mandate 'BBE' on the ward always should be aware of the new guidance that this practice is only applied during direct patient contact.

All staff should be trained in strategies to reduce conscious and unconscious biases, stereotypes and discriminatory behaviour. Theatre managers need to be made aware of the importance of headscarf provision for Muslim women, so they do not feel uncomfortable or questioned about its use. Trusts may enquire whether the disposable headscarf designed by the research team can be taken forward. Another acceptable solution has been adopted by Worcestershire and Leicester trust, who allow Muslim female healthcare professionals to wear their own 'clean, washed and brought in daily' headscarves, which are brought in specifically for theatre wear.

Muslim women should be empowered to negotiate solutions and work openly with trusts. As our findings show, they may be deterred from a career in surgery simply due to having to compromise their faith by wearing attire which insufficiently covers them. Ali and Bowbrick³² affirm that 'there needs to be greater awareness among staff on such flexibility in uniform policy'; however, there

was a lack of desire to create provision for theatre dress that is sensitive to religious tradition.

CONCLUSION

The overall aim of the study was to investigate Muslim women's experiences of wearing the headscarf and explore responses to the BBE policy to demonstrate how policies can be sometimes counterproductive, leading to unintended consequences. Understanding these views is vital to encourage recruitment from this religious minority and to implement measures to avoid the possible danger of them feeling alienated from the NHS workforce. It appears that trusts have not put in place a national policy leaving dress codes open to interpretation in individual trusts. This has led to Muslim professionals experiencing problems with the headscarf in theatre and not being able to cover their arms on the wards when in direct patient contact. In conclusion, there is indirect discrimination occurring, a violation of the human rights to practice one's religion, due to inadequate provision and guidance on how some Muslim women who choose to wear a headscarf, can do so in theatre and cover their arms on the wards in line with religious sensitivities.^{46 47}

Author affiliations

¹School of Sociology and Social Policy, University of Nottingham, Nottingham, UK

²Research Department, Bridge Institute for Research and Policy, London, UK

³Portland Medical Practice, Lincoln, UK

⁴Poole Hospital NHS Foundation Trust, Poole, UK

⁵School of Medicine, University of Nottingham, Nottingham, UK

⁶KSS Deanery, Maidstone District General Hospital, Maidstone, UK

⁷East Midlands Deanery, University Hospitals of Leicester NHS Trust, Leicester, UK

⁸University College Hospital, London, UK

⁹School of Health Sciences, University of Nottingham, Nottingham, UK

Acknowledgements The authors would like to thank all the study participants without whose participation, this study would not have been possible. The authors would also like to thank the British Islamic Medical Association (BIMA), who allowed to distribute study questionnaires at their 'Muslim Women Excelling in Islam and Medicine Conference'.

Contributors HQ, EW, FZJ and ZY declare membership to British Islamic Medical Association (BIMA). BIMA is currently developing a surgical garment to be worn in theatres.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not required.

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement No additional data available.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

REFERENCES

- Cummings J. *Building and Strengthening Leadership*: NHS England, 2014:3–12.
- Request for a preliminary ruling from the Hof van Cassatie (Belgium) lodged on 3 April 2015 — Samira Achbita, Centrum voor gelijkheid van kansen en voor racismebestrijding v G4S Secure Solutions NV, 2015. Case C-157/15 (Court of Justice).
- The White House. *Executive Order Protecting the Nation from Foreign Terrorist Entry into The United States*, 2017.
- Syed IUB. Forced Assimilation is an unhealthy policy intervention: the case of the hijab ban in France and Quebec, Canada. *The International Journal of Human Rights* 2013;17:428–40.
- Burnett J, Athwal H. *Racial violence and the Brexit State*: Institute of Race Relations. 2016.
- Ali S. *British Muslims in Numbers: A Demographic, Socio-economic and Health profile of Muslims in Britain drawing on the 2011 Census*: The Muslim Council of Britain. 2015.
- Martin MB. Perceived Discrimination of Muslims in Health Care. *J Muslim Ment Health* 2015;9:41–69.
- Qur'an. The Holy Qur'an [Online]. 2017. Available: <http://corpus.quran.com/translation.jsp?chapter=33&verse=59> (Accessed 02 Jul 2017).
- Siraj A. Meanings of modesty and the hijab amongst Muslim women in Glasgow, Scotland. *GenD Place Cult* 2011;18:716–31.
- Minney S. *Policy for Uniform and Work Wear*: Northamptonshire Teaching Primary Care NHS Trust. 2008.
- Mackenzie M, Foster S. *Dress Code and Uniform Policy*: Heart of England NHS Foundation Trust, 2013.
- Winfield C. *Dress Code Uniform Policy*: Derby Teaching Hospitals NHS Foundation Trust, 2017.
- Cawthorne J, Wade L. *Dress Code Policy*: Central Manchester University Hospitals NHS Foundation Trust, 2011.
- Watt J. *Dress Code Policy*: Sheffield Teaching Hospitals NHS Foundation Trust. Services NHS Trust, 2010.
- Allen K. *Uniform Laundering Policy*: St Helens and Knowsley Hospital NHS Trust, 2014.
- Lambourne R. *Dress Code and Uniform Policy*: Nottingham University Hospitals NHS Trust, 2011.
- Alstrom C. *Dress code and uniform policy: version 4*: Isle of Wight NHS Trust, 2011.
- Student Room. Hijab/Headscarf allowed in hospital? [Online]. 2017. Available: <https://www.thestudentroom.co.uk/showthread.php?t=2059553> (Accessed 27 Jul 2017).
- NHS. Building a diverse workforce: diversity and inclusion [Online]. 2017. Available: <http://www.nhsemployers.org/your-workforce/plan/building-a-diverse-workforce> (Accessed 27 Jul 2017).
- Department of Health. *Uniforms and workwear: An evidence base for developing local policy*, 2007.
- Wilson JA, Loveday HP, Hoffman PN, et al. Uniform: an evidence review of the microbiological significance of uniforms and uniform policy in the prevention and control of healthcare-associated infections. Report to the Department of Health (England). *J Hosp Infect* 2007;66:301–7.
- Loveday HP, Wilson JA, Hoffman PN, et al. Public perception and the social and microbiological significance of uniforms in the prevention and control of healthcare-associated infections: an evidence review. *British Journal of Infection Control* 2007;8:10–21.
- NICE. National Institute for Health and Care Excellence [Online]. 2017. Available: <https://www.nice.org.uk/guidance/> (Accessed 01 Jul 2017).
- Department of Health Policy. Uniforms and workwear: guidance on uniform and workwear policies for NHS employers. 2010. Available: www.ncuh.nhs.uk/about-us/freedom-of-information/disclosure-log/requests/infection-control/000771-09.pdf (Accessed 27 Jul 2017).
- Priest N, Esmail A, Kline R, et al. 'Promoting equality for ethnic minority NHS staff—what works?'. *BMJ* 2015;350:h3297.
- Hebert K. Are you getting naked? *BMJ* 2008;336:s129–30.
- Dawson J. *Does the experience of staff working in the NHS link to the patient experience of care? An analysis of links between the 2007 acute trust inpatient and NHS staff surveys*: Institute for Health Services Effectiveness, Aston Business School, 2009.
- Esposito JL. *The Oxford Dictionary of Islam*. Oxford: Oxford University Press, 2003.
- Herring C. Does diversity pay?: Race, gender, and the business case for diversity. *Am Soc Rev* 2009;74:208–24.
- Kline R. *The "snowy white peaks" of the NHS: a survey of discrimination in governance and leadership and the potential impact on patient care in London and England*: Middlesex University Research Repository, 2014.
- West M, Dawson J, Kaur M. Making the difference: Diversity and inclusion in the NHS. *The Kings Fund* 2015.
- Ali S, Bowbrick V. Supporting diversity in surgical careers: flexibility in theatre uniforms. *BMJ* 2014:g1213. Available: <http://careers.bmj.com/careers/advice/view-article.html?id=20016322>

33. Kline R, Martin B. *Discrimination by Appointment: How black and minority ethnic applicants are disadvantaged in NHS staff recruitment*: Public World, 2013.
34. Jaques H. White doctors are almost three times more likely to land hospital jobs than ethnic minority doctors. *BMJ* 2013:f5697.
35. McManus IC, Richards P, Winder BC, *et al*. Medical school applicants from ethnic minority groups: identifying if and when they are disadvantaged. *BMJ* 1995;310:496–500.
36. McKenzie KJ. Racial discrimination in medicine. *BMJ* 1995;310:478–9.
37. Limb M. NHS doctors face racism, exclusion, and discrimination, report finds. *BMJ* 2014:g4960.
38. Naqvi H, Razaq SA, Piper J. *NHS workforce Race Equality Standard: 2015 Data Analysis Report for NHS Trusts*: NHS Equality and Diversity Council, 2016. PGRN: 06689.
39. Cooper C. Furious row and threat of legal action as academic says professional body refuses to admit problem [Online]. 2013. Available: <http://www.independent.co.uk/life-style/health-and-families/health-news/racial-discrimination-against-black-and-ethnic-minority-trainee-doctors-can-t-be-ruled-out-warns-8876498.html> (Accessed 04 Dec 2017).
40. BMA. BMA Forum: Do Patients Bully Doctors? [Online]. 2014. Available: <https://www.bma.org.uk/connecting-doctors/bmaspace/ff/21/t/242> (Accessed 04 Dec 2017).
41. England NHS. Workplace experiences of BME and white staff published for every NHS trust across England [Online]. 2016. Available: <https://www.england.nhs.uk/2016/06/wres-publication/> (Accessed 04 Dec 2017).
42. Fincham JE. Response rates and responsiveness for surveys, standards, and the Journal. *Am J Pharm Educ* 2008;72:43.
43. Wiley E, Qureshi H, Javaid F. An audit of whether hospital trusts are providing an alternative to 'Bare Below Elbows' for Muslim female healthcare professionals. *Poster presentation, British Islamic Medical Association conference* 2017.
44. Abu Bakar S. Doctor's attire and patient safety. *Med J Malaysia* 2009;64:185–6. Editorial.
45. Markel TA, Gormley T, Greeley D, *et al*. Wearing long sleeves while prepping a patient in the operating room decreases airborne contaminants. *Am J Infect Control* 2018;46.
46. Phillimore J. Approaches to health provision in the age of super-diversity: Accessing the NHS in Britain's most diverse city. *Crit Soc Policy* 2011;31:5–29.
47. West M, Dawson J, Admasachew L, *et al*. *NHS Staff Management and Health Service Quality Results from the NHS Staff Survey and Related Data*: Lancaster University Management School and The Work Foundation Aston Business School, 2012. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/215455/dh_129656.pdf