

## ABSTRACT

The UK nursing workforce is facing a crisis. More nurses are leaving than entering the profession and there are tens of thousands of unfilled vacancies. Political factors are having a significant impact on numbers, in particular the decision to withdraw bursaries for nursing undergraduates and a steep decline in EU nurses registering to work in the UK post-Brexit. Against this backdrop, there is a stark gender imbalance in the workforce with only around 11% of registered nurses being male. We surveyed UK higher education institutions to try and identify whether the gendered nature of nursing was considered a concern and whether steps were being taken to address it. We sent an electronic survey to every UK university offering undergraduate nurse training validated by the Nursing and Midwifery Council (NMC). With a response rate of 42%, the majority of respondents felt that nursing departments should take much more responsibility to increase the proportion of male nurses entering the nursing profession. More needs to be done to diversify the workforce and make nursing an appealing career choice for men and women.

## INTRODUCTION

There is a global shortage of nurses, leading to dangerous implications for health and social care (World Health Organisation (WHO), 2017). This is of particular concern in the UK where a number of factors are impacting on the ability to recruit and retain nurses.

Brexit, withdrawal of bursaries for nurse training, government imposed pay caps and an ageing workforce are leading to a 'perfect storm' in recruitment and retention (NHS Confederation, 2016).

The latest figures for the National Health Service (NHS) workforce in England do little to dispel these concerns:

- More nurses are leaving the profession than entering
- 36,000 - 42,000 unfilled nursing vacancies
- 1 in 3 nurses due to retire in the next 10 years
- 89% drop in EU applicants to the NMC register since the Brexit vote
- 67% increase in the number of EU nurses leaving the NMC register

*Nuffield Trust (2018)*

In addition, there were 9,990 fewer undergraduate nursing applicants since the bursary was axed and fees were introduced (Boffey, 2017).

This potential crisis is in the context of a significant gender imbalance in the profession. Currently, only 11.4% of UK registered nurses are male (Williams, 2017), with a similar number in training. This figure reflects that of other western nations, where the nursing workforce is predominantly female.

We surveyed UK Higher Education Institutions (HEIs) offering undergraduate nurse training, to identify whether the gendered nature of nursing was being addressed at pre-registration level. To our knowledge, it is the first survey of its kind and could provide a basis for a strategic approach to encouraging men into the profession.

We are at a critical point in future-proofing the supply of nurses, but there appears to be little emphasis on the role that men might play in strengthening the workforce. This paper positions nursing as a socially constructed female occupation and makes a case for action to challenge that.

Whilst set in the context of the UK's NHS and HEIs, it is suggested the findings are relevant to other western nations with a shortage of male nurses.

## BACKGROUND

The NHS has seldom been out of the news in recent months, portrayed as an organisation in crisis with a workforce under pressure. Furthermore, a recent report found that nurses are now amongst the those identifying as homeless (Local Government & Social Care Ombudsman, 2018), something which one commentator described as 'the end of days' (Ellen, 2017). It could be seen as a career with limited appeal.

With the workforce dwindling, should more efforts be made to attract males into to nursing? Sullivan (2002) highlights the complex relationship between feminism, nursing and men, but argues that we can no longer ignore the glaring gender imbalance in the profession. She suggests by encouraging men to join the profession, it will increase the pool of talent, improve working conditions for women and benefit society as a whole.

Other areas of industry facing a similar recruitment crisis are science, technology, engineering and mathematics (STEM), where there is an annual shortfall of 69,000 workers (WISE, 2017). Around 50,000 girls turn away from STEM careers at school and only 24% of STEM subject graduates are female (WISE, 2017). Recognising this untapped resource, there are now significant efforts being made to encourage women into STEM subjects, both to improve gender balance and to fill the gap in the labour market. With such an approach being taken in the STEM industries, could similar strategies be used to encourage men into nursing? In 2009, King's College London made the case for this, yet it does not appear to have been acted upon. Latest figures show a 16% drop in male applicants to pre-registration nurse training in England, and a 31% decline in Northern Ireland (Council of Deans of Health, 2018).

There is little in the literature offering evidence-based approaches to encouraging men into nursing, particularly in the UK. In their recent review of the labour market, even the RCN (2016) failed to mention gender disparity in the workforce.

Much of the current activity into increasing the number of male nurses originates in the USA where significant steps are being taken, albeit with limited success, to attract and

retain men into the profession (AAMN, 2017). With a different health and education system, these approaches are not necessarily applicable to the UK, but they are pertinent to the global debate on the subject.

It's worth noting that the UK had a similar movement in the past, called the Society of Registered Male Nurses:

“aimed to maintain the traditions of the nursing profession among men nurses; assist its members to keep in touch with modern techniques; solve professional problems where possible; encourage high standards of professional conduct; and, assist men nurses in training to obtain a high standard of efficiency and professional skill.”

(Evans, 2004, p323)

Borne out of having separate registers for male and female nurses, it merged with the RCN in 1941.

In reviewing the literature, Roth & Coleman (2008), Larson (2013), Macwilliams et al (2013) and O'Brien et al (2008) all highlight the issues of gender imbalance in nursing, however none provide an evidence based strategy to address it. Given the paucity of research on the subject, it is vital that further investigation is carried out if we are to help prevent a crisis in the workforce. As Haydon (2017, p35) argues, *“it's too important an issue to ignore.”*

## METHODS

### Study design and participants

An online electronic survey was used, and data was collected in the form of a pre-designed questionnaire. Using non-random purposive sampling method the questionnaire was distributed via email to all Deans or Heads of Nursing (or their equivalent) in Schools or Departments of Nursing in all of the Higher Education Institutions (HEIs) of all four countries in the United Kingdom who are validated by the

Nursing and Midwifery Council (NMC) to offer pre-registration nursing programmes (n=75).

### Questionnaire

We were not aware of any pre-existing validated tool or questionnaire that could be used to measure the attitudes HEIs have towards the promotion of men on to nursing programmes and subsequently entering into the nursing profession in the UK. In scoping the literature we found that the American Assembly of Men in Nursing (AAMN) recognised the achievements of Schools or Colleges of Nursing in the USA that endeavoured to make “significant efforts in recruiting and retaining men in nursing, in providing men a supportive educational environment, and in educating faculty, students and the community about the contributions men have and do make to the nursing profession” (AAMN 2017). Based on their 7-point good practice criteria we devised a 14-item questionnaire comprising two demographic questions and ten 3-point Likert-style items relating to the recruitment and involvement of male students. The extent of positivity towards men in nursing was assessed by a single score derived as a sum of all items, with high scores representing greater levels of positivity. A further question was asked to determine the current levels of male members of staff and students in each HEI. The final question asked how strongly the respondent felt that schools of nursing had a responsibility to increase the percentage of men entering the profession.

### Data analysis

The data were statistically analysed descriptively and inferentially. Inferential analysis procedures included t-testing and chi-squared testing for comparative procedures (comparing institutions with high and low proportions of male staff members) and multiple logistic regression modelling for controlled analyses. All data analysis was conducted using IBM SPSS (Version 22.0) statistical software.

## RESULTS

Data was collected from representatives of 32 HEIs in the United Kingdom, who offer undergraduate degree level nursing programmes in all four fields of practice, a 42% response rate. Of these institutions who responded, 31 offered adult nursing; 27 offered mental health nursing, 22 offered child nursing and 10 offered learning disability nursing. All HEIs in this survey offered nursing programmes in at least two fields of nursing practice with 10 HEIs offering programmes in all four fields of practice.

Respondents were also asked to specify the proportion of (i) male members of nursing staff; and (ii) male students amongst their current nursing cohort. Options given were: 0-10%; 11-30%; 31-50% and over 50%. Due to low frequencies of respondents in the 0-10% and over 50% groups, both variables were combined into 2 levels with categories: 0-30% (*low*) and over 30% (*high*).

A further question was asked relating how strongly the individual respondent felt that schools of nursing had a responsibility to increase the percentage of men entering the profession. Again, this was recorded as a 3-point Likert-style item, with higher scores reflecting a perception of greater responsibility required.

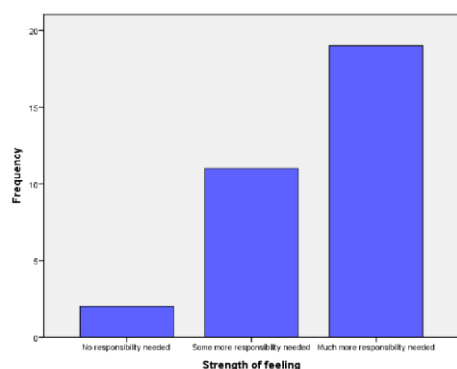
Positivity scores reported by each institution ranged from 1 to 13 (from a maximum of 20); with an overall mean of 6.84 points (SD 3.14 points). 22 institutions (68.8%) reported fewer than 30% of nursing staff to be male, with 10 institutions (31.2%) reporting a corresponding figure of over 30%. 21 institutions (65.6%) reported fewer than 30% male students in their current nursing cohorts; with 11 institutions (34.4%) reporting a corresponding figure of over 30%.

The majority of respondents (19; 59.4%) felt that nursing departments should take much more responsibility to increase the proportion of male nurses entering the nursing profession. 11 respondents (34.4%) perceived that some more responsibility was needed; while 2 respondents (6.3%) did not consider that nursing departments need take any responsibility in this matter (Table 1, Figure 1).

**Table 1: Summary of responses to statement that nursing departments should take more responsibility to increase the proportion of male nurses entering the nursing profession**

Response	Frequency (valid %)
No responsibility needed	2 (6.3%)
Some responsibility needed	11 (34.4%)
Much more responsibility needed	19 (59.4%)

**Figure 1: Summary of responses to statement that nursing departments should take more responsibility to increase the proportion of male nurses entering the nursing profession**



Positivity scores were compared across groups of institutions with *low* and *high* proportions of male staff members. Mean positivity scores were found to be 7.32 points in the *low* group and 5.80 points in the *high* group; hence the *low* group scored 1.52 points higher. A 95% confidence interval for the difference was given by (-0.91, 3.94). The difference was assessed using an independent samples t-test and found to be non-significant at the 5% significance level ( $p=0.211$ ). Hence there is no evidence that the proportion of male staff members is associated with levels of positivity towards men in nursing.

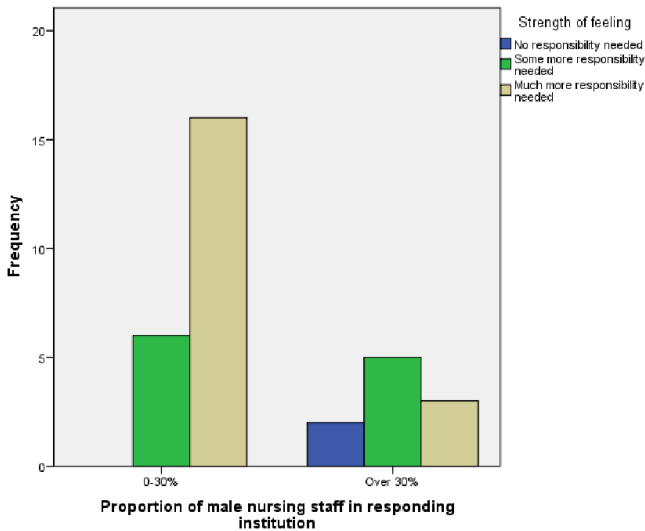
A further analysis was conducted using a  $\chi^2$  test for association to assess any association between the proportion of male staff in a particular institution and the proportion of male students in the current nursing cohort at that institution. Amongst the 22 institutions reporting *low* (30% or under) proportions of male nursing staff members, 6 had a male nursing student cohort of over 30% (27.3%). Amongst the 10 institutions reporting *high* (over 30%) proportions of male nursing staff members, 5 had a male

nursing student cohort of over 30% (50.0%) (Table 2, Figure 2). The association was non-significant at the 5% significance level ( $\chi^2_{(1)}=1.57$ ;  $p=0.210$ ). The magnitude of the association was small-to-medium ( $\phi=0.222$ ).

**Table 2: Cross-tabulation of responses to statement that nursing departments should take more responsibility to increase the proportion of male nurses entering the nursing profession; by percentage of male nursing staff members at institution**

Proportion of male nursing staff members	Responses to statement that nursing departments should take more responsibility to increase the proportion of male nurses entering the nursing profession (Frequency (valid %))		
	No responsibility needed	Some more responsibility needed	Much more responsibility needed
Low (0-30%)	0 (0.0%)	6 (27.3%)	16 (72.7%)
High (over 30%)	2 (20.0%)	5 (50.0%)	3 (30.0%)
All institutions	2 (6.3%)	11 (34.4%)	19 (59.4%)

**Figure 2: Summary of responses to statement that nursing departments should take more responsibility to increase the proportion of male nurses entering the nursing profession; by percentage of male nursing staff members at institution**





The association between proportions of male staff members and male nursing students was also assessed, controlling for positivity scores in a multiple logistic regression analysis. The inference of non-significance of proportion of male staff members on proportion of male nursing students remained ( $p=0.198$ ); with an odds ratio (OR) of 2.89 (95% CI: 0.57, 14.5). The controlling variable of positivity scores was also not significantly or substantively related to the proportion of male students in the nursing cohort ( $p=0.698$ ; OR=1.05; 95% CI: 0.82, 1.35). Hence there is no evidence that either proportion of male staff members or levels of positivity towards men in nursing is associated with proportions of male students in nursing cohorts.

A further analysis using a  $\chi^2$  test for association was conducted to investigate the extent of any relationship between these same variables and the level of responsibility towards increasing the proportion of male nursing students perceived to be required by nursing institutions. For this analysis, due to the low numbers of respondents considering that departments need not take any responsibility towards increasing the proportion of male nursing students, this category was merged with the response that some (not much) more responsibility was required.

Amongst the 22 institutions with low proportions of male nursing staff members, 16 respondents (72.7%) felt that institutions need to take much more responsibility towards increasing the proportion of male nursing students. Amongst the 10 institutions with high proportions of male nursing staff members, 3 respondents (30.0%) felt that institutions need to take much more responsibility towards increasing the proportion of male nursing students. This association was found to be significant at the 5% significance level ( $\chi^2_{(1)}=5.20$ ;  $p=0.023$ ). The magnitude of the association was medium-to-large ( $\phi=0.403$ ). Hence there is evidence that the proportion of male nursing staff members in an institution is associated with perceived levels of responsibility on the part of institutions towards increasing the proportion of male nursing students.

## DISCUSSION

In this study, the first of its kind undertaken in the UK, the majority of HEIs offering pre-registration nursing programmes were of the opinion that much more should be done to increase the number of men entering the nursing profession. This is an encouraging development, however recent data from UCAS (University College Admission Service, 2018) show that men account for just 10% of the total nursing students placed at UK universities; 2,800 men accepted compared with 26,000 women last year. These figures are a general reflection of the current number of men on the NMC register.

In England, Coventry University has taken 'positive action' to address this gender imbalance by offering a fund of £30,000 to help 10 men in subjects where they are under-represented including nursing, occupational therapy, physiotherapy, midwifery, operating department practice, and dietetics (Coventry University, 2017). This is believed to be the first award of its kind in the UK aimed towards creating a more diverse workforce in healthcare subjects and professions.

Similarly, the University of Nottingham has taken steps to encourage men into nursing, following surprising feedback received during the Athena SWAN application process (Aubeeluck et al 2017). Originally created to increase the number of females in STEM subjects, the Athena SWAN Charter recently broadened its remit to promoting gender equality across the board. Following concerns that they were less likely to offer nursing places to males, the university have produced videos and images featuring male nurses and have males on all selection panels and at careers fairs.

Since we conducted our survey, we note that the University of Dundee has launched a #MenDoCare campaign to attract males into nursing, arguing 'relying on only half the population is untenable' (University of Dundee, 2017).

It is worth noting that Scotland continues to fund undergraduate nurse training, retaining the bursary which was scrapped in England. This year will see an increase of over 10% in fully funded nurse training places in Scotland (Royal College of Nursing, 2018).

In our study we did not find that the proportion of male nursing staff in the HEI was associated with increased levels of positivity towards men in nursing. Could this suggest that male nurses within Higher Education in the UK do not consider themselves as role models? Are they engaged in influencing strategies within their faculty aimed at attracting men into nursing? This reflects the findings of Zhang and Lui (2016) who found in their review of the literature that nursing faculties need to develop an atmosphere of acceptance and empower male nursing students in the nursing school and clinic. They argue that male nurses themselves should demonstrate that nursing is a profession suitable for both genders.

In parallel, there are few positive role models in the media for men considering a career in nursing. Indeed, Stanley (2012) found they were consistently portrayed in a negative light:

“Male nurses in feature films remain the butt of jokes, undervalued as skilled clinical professionals or simply shown as uncaring or incompetent.”

It must therefore be incumbent upon male nurses in practice to promote the profession as a positive career option for men, and engage in strategies to widen participation and increase diversity in the workforce.

Perhaps the most significant finding in this study was the evidence that the proportion of male nursing staff members in an institution is associated with perceived levels of responsibility on the part of institutions towards increasing the proportion of male nursing students. Hence lower number of male staff in faculty meant a more positive attitude towards increasing the number of male students on programmes. It might be that the less stringent attitudes towards institution-level responsibility in those institutions with higher proportions of male nursing staff reflect a feeling that in taking on more male staff, the institution has fulfilled its obligations in this regard and need not, or cannot, take further practical steps to raise the proportion of male students in current nursing cohorts?

Of course it is not the sole responsibility of HEIs and Schools/Departments of nursing to try to address the gender imbalance of the nursing profession. This is an intransigent societal problem in which the role of women within nursing and wider society has been politicised and socially constructed. As Mackintosh (1997) suggests in the historical development of nursing in the UK, men and women had an equally valid role within the occupation until a paradigmatic shift took place based on the work of Florence Nightingale and Mrs. Fenwick in their desire to create a “respectable female profession”, and this model has resiliently stood the test of time.

### CONCLUSION

The majority of UK HEIs offering pre-registration nursing programmes believe that more should be done to encourage men to enter the profession. Examples of some of the efforts being made have been identified, but it is too soon to know how effective these measures have been. Meanwhile, the workforce faces unprecedented pressures. More needs to be done to diversify the workforce and make nursing an appealing career option for men and women.

### Ethical Considerations

Ethical approval was granted by the ethics committee in the Faculty of Human and Life Sciences at De Montfort University, England, UK. Consent to participate was implied from participants completing the questionnaire.

### Conflict of Interest Statement

The authors do not knowingly have any conflicts of interest in the above research. This research did not receive any specific grant from funding agencies in the public, commercial or not-for-profit sectors.

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