

Pre-registration nursing recruitment and retention – underrepresentation of men, influences and causes

FINAL REPORT for the Scottish Collaboration for the Enhancement of Pre-Registration Nursing (SCEPRN) and commissioned by NES

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Executive Summary

Aim and Objectives

The study aimed to explore the influences and causes of underrepresentation of men in pre-registration nursing in Scotland. The objectives were to

- establish the rates of recruitment and retention of males to pre-registration programmes of nursing education in Scotland (including all fields of nursing and pre-registration MSc options) in Scotland over the past 5 years
- explore the influences on recruitment rates of males to pre-registration nursing education in Scotland through gathering the views and experiences of male pre-registration nursing students, nursing and further education college lecturers and school guidance teachers
- and develop strategies to address the issues

Methods

The study was carried out in six phases:

1. A review of the literature was carried out to identify the experience and attitudes of men on pre-registration nursing programmes and the barriers and facilitators to recruitment and retention. A search was carried out, papers selected based on inclusion and exclusion criteria, data extracted, critical appraisal carried out, and data synthesised.
2. Data about recruitment and retention rates of males to pre-registration courses in Scotland was obtained from NES.
3. Eight focus groups with 33 male nursing students from four universities across Scotland were held to find out about what attracted them into nursing and their experiences of the facilitators and barriers to applying to nursing.
4. Four focus groups with 21 university and further education college nursing lecturers from four areas of Scotland were held to find out their views about the facilitators and barriers to recruiting men into nursing and the challenges male students experience while at University.
5. An online survey was sent by email to secondary school careers advisors and guidance teachers throughout Scotland. The survey included 4 open questions asking their views about the reasons for the low numbers of male nursing students and nurses. Responses were received from 46 teachers from across Scotland.
6. A consensus building event was held in a central location with 53 stakeholders from across Scotland to present the findings from the preceding phases and to seek consensus about recommendations and actions to address the issues identified.

Ethical approval was gained for phases 3, 4 and 5. Analysis of the qualitative data followed the phases of compiling, disassembling, reassembling, interpreting and concluding (Yin 2016). Confirmation of the final themes was through discussion with project team members who all participated in the data collection.

Findings

Data about recruitment and retention rates of males to pre-registration nursing programmes in Scotland confirmed that despite some local variations, less than 10% of nursing students in Scotland are male, a figure that has been largely unchanged for the past

10 years. Although numbers are lower, an important finding is that male students are less likely to complete their programme than female students.

The findings of the literature were congruent with the qualitative data analysis and confirmed that nursing is viewed as worthwhile for men, providing a rewarding career in a caring profession, financial security and opportunities for travel. However, nursing is inherently seen as a female profession and this is a powerful deterrent for many. Positive examples of male nursing role models, personal experience of care or caring, and support or recommendation from significant others can help to overcome this societal view. Maturity was also seen as a resilience factor to overcome the female stereotype of nursing. For more mature applicants the financial challenges of studying were also noted to be particularly problematic, and the low earning potential of nursing may be a disincentive for some.

In practice, male students felt it was assumed by female clinical staff that they would have career aspirations and ambition. In clinical placements gender differences in communication style and the positive effect of a more gender balanced workforce were felt to be advantages. While some patients were accepting of intimate care by men, the provision of intimate care by male nurses in some clinical areas could be problematic. The term 'male nurse' reinforced the female nursing stereotype and was felt to be incongruous. Some 'technical' clinical areas or specialities with a higher proportion of men were felt to be more attractive to male nurses.

The absence of a male presence in advertising or university recruitment material was not helpful. In particular, teachers reported a lack of knowledge about the role and variety of career options, with a need for more visible male nursing role models.

Recommendations

1. A positive rebranding of nursing at a national level is needed. This should be gender-neutral and promote the skills and qualities of a nurse, the academic nature of the programme, the transferability of skills, the financial stability of the profession, the range of career opportunities and the opportunities for career mobility. Social media and 'day in the life' stories could be used effectively.
2. Education should begin early (pre-school and in primary schools) with the early introduction of health and health care topics using gender-neutral images and language.
3. Acknowledging the potential influence of careers advisors and guidance teachers in secondary schools, greater efforts should be made to provide schools with gender-neutral information, educate about reality of the role of the nurse and promote nursing as an aspirational career with a range of options.
4. A co-ordinated marketing campaign by colleges, universities, and the NHS is needed to emphasise the different routes into nursing.
5. High profile examples of men in nursing are needed as role models and to provide outreach examples in school and at careers events. The narratives of nurses who are men could be easily commissioned and used as positive examples of men in nursing.
6. Potential applicants should be provided with opportunities to experience the reality of nursing before applying, such as taster sessions.

7. Unconscious bias training should be provided to NHS, college and university staff about the importance of using gender-neutral language and images and avoiding the use of the term 'male nurse'.

Further research is needed:

1. To understand the reasons for the higher attrition rates among male nursing students.
2. To understand the reality of nursing for men in Scotland.
3. To further explore the data relating to gender, age, field of nursing, level or award, clinical environment and geographical area.
4. To explore the impact of a more gender balanced workforce.

Introduction

Currently in Scotland the percentage of male nursing students is between 8 – 10% (Scottish Government 2017). The Gender Action Plan has set a target that no subject should have an extreme gender imbalance of more than 75/25 by 2030 (Scottish Funding Council 2016). The Chief Nursing Officer (CNO) Commission on Widening Access to Nursing and Midwifery education and careers has suggested that best practice in the area of attracting more men into nursing should be identified, and recommendations for a national approach are needed (Scottish Government 2017). This project was commissioned and funded by NHS Education Scotland (NES) to investigate the influences and causes on the underrepresentation of men in nursing.

Aim and Objectives

Aim:

- To explore the influences and causes of underrepresentation of men in pre-registration nursing in Scotland

Objectives:

- To establish the rates of recruitment and retention of males to pre-registration programmes of nursing education in Scotland (including all fields of nursing and pre-registration MSc options) in Scotland over the past 5 years
- To explore the influences on recruitment rates of males to pre-registration nursing education in Scotland
 - Views and experiences of male pre-registration nursing students
 - Views and experiences of nursing and further education college lecturers
 - Views and experiences of school guidance teachers
- To develop strategies to address the issues

Methods

Data collection proceeded in 6 phases:

1. Literature review
2. Data on recruitment and retention rates
3. Views of male students on pre-registration programmes in Scotland
4. Views and experiences of nursing and further education college lecturers
5. Views and experiences of school guidance teachers and careers advisors
6. Consensus building event

Phases one and two were carried out concurrently with phases three, four and five. The findings of phases one to five were presented in the final phase, the consensus building event (phase six).

Literature Review (Phase one)

Review Aims and Questions

In phase one, an evidence review was conducted to identify the experiences and attitudes of men on pre-registration nursing programmes and the barriers and facilitators to both recruiting men to pre-registration nursing courses and the retention of men on such courses. For the purposes of this review, nursing was considered to include adult nursing, midwifery, mental health, learning disabilities or child nursing. More specifically, the aim of the review was addressed through the following research questions:

1. What are the barriers and facilitators to recruiting men to pre-registration nursing courses?
2. What are the experiences of men on pre-registration nursing courses during theory and clinical placements?
3. What are the barriers and facilitators to retention on pre-registration nursing courses?

Searches

A search strategy was developed by a Research Fellow experienced in conducting Systematic Reviews (see Appendix 1 for full search strategies). Searches were carried out in the following databases: Medline (Ovid), CINAHL (EBSCO)(both on 14/12/17) and PsycINFO (EBSCO)(on 15/12/17). The search was restricted to studies published in English from 2000 onwards. Reference lists of all included studies were examined for any additional studies that may not have appeared in the database search.

Inclusion Criteria

- Studies were included in the review if they examined men's experiences and/or attitudes to pre-registration nursing education and/or men's experiences of applying for pre-registration courses. This included all branches of nursing and midwifery.
- Study participants had to include men either applying for pre-registration courses, men on pre-registration courses or men leaving pre-registration courses. In the case that studies included both male and female students, studies were included if the data from male participants could be separated from female participants.

- In order to ensure relevance to nursing and midwifery in the UK, studies were only eligible for inclusion if they were conducted in countries with a similar Western culture (i.e. Europe, North America, Australia, New Zealand).
- Any type of qualitative or quantitative primary study was eligible for inclusion provided it reported empirical methods and results.
- Studies could either be published (i.e. in academic journals) or unpublished (i.e. dissertations). Studies not published in English or published before 2000 were excluded.

Study Selection

All study records identified from the database search were exported into Endnote Reference Management Software and de-duplicated. The titles and abstracts of all identified records were screened by one reviewer. The full texts of any studies potentially meeting the inclusion criteria were retrieved and then independently screened by AG and another reviewer. In the case that the two reviewers disagreed, a third reviewer was consulted. Similarly, the full-texts of any additional studies identified from reference lists of included studies were screened independently by two reviewers.

Data Extraction

A data extraction form was developed to extract the following information: study aim; geographical setting; context (when information available this included details on course and percentage of male nursing students); study design; analysis; participant details; and study findings. For qualitative studies, findings were considered to include direct quotes as well as the study author's interpretation of the data. This information was summarised in the data extraction table. For quantitative data this included raw data and/or results of any statistical tests.

Critical Appraisal

As this review included quantitative, qualitative and mixed-methods studies, a range of critical appraisal tools appropriate for each study design were used. More specifically, the Appraisal tool for Cross-Sectional Studies (AXIS) was used for cross-sectional quantitative questionnaire studies (Downes et al., 2016). For qualitative studies the Critical Appraisal Skills Programme (CASP) qualitative checklist was used (CASP, 2017). Finally the Mixed Methods Appraisal Tool (MMAT) was used for mixed methods studies (Pluye and Hong, 2014).

Data Synthesis

The findings from both quantitative and qualitative studies were analysed thematically and presented in a narrative synthesis. After extracting all data on study findings a coding frame was developed and findings were then categorised into the following themes: recruitment experiences/reasons for studying nursing; gender experiences; barriers, difficulties and challenges with course; and facilitators and positives of the course. The themes were then explored for contradictory cases or contextual information which may explain differences in responses.

Data about recruitment and retention rates of males to all pre-registration nursing programmes in Scotland in the past 5 years (Phase two)

For phase two, national data about the gender composition of pre-registration cohorts in Scotland was requested from NES for the past 5 years. In addition, gender composition data about ordinary and honours cohorts from each of the four institutions directly involved in the project was also requested from NES. NES also provided national data about retention rates on programmes.

Views, experiences and attitudes to men in nursing in Scotland

In phases three and four of the qualitative data collection, the same methodology was used in each location. The paperwork in each place was amended to include the local contact person. Phases one and two were carried out concurrently with phases three, four and five, so the findings from the initial phases were not available to inform the qualitative phases.

Pre-registration male students (Phase three)

Phase three involved focus groups with male pre-registration nursing students (including pre-registration male MSc students where this was offered). These were held throughout Scotland during January – April 2018. Two focus groups had previously been held at the University of Dundee in June 2017 using the same methodology: the data from these were included. Invitations were sent by email with a Participant Information Sheet (Appendix 2) and interested participants responded by email. The focus groups were held in a room in the local University premises and all were recorded and subsequently transcribed. Questions were asked about their views and experiences about what attracted them into nursing and the facilitators and barriers to applying to nursing (Appendix 3). Consent was sought before the start of the focus group (Appendix 4). A total of 33 students took part in 8 focus groups. Table 1 gives details of numbers of participants and locations.

Table 1: Focus groups with male pre-registration students - number and location of focus groups and students

	Number of Focus Groups	Number of Students
University of Dundee	3	12*
University of Edinburgh	2	7
University of West of Scotland	2	8
Robert Gordon University, Aberdeen	1	6

* Including one focus group with 5 MSc students

One-to-one interviews with male students who had withdrawn or dropped out in the last 3 years were planned, however it was not possible to collect this data due to Data Protection restrictions.

University and further education college nursing lecturers (Phase four)

Phase four involved focus groups with university and further education college nursing lecturers which were held throughout Scotland during January – March 2018. Invitations were sent by email with a Participant Information Sheet (Appendix 5) to local contacts and

interested participants responded by email. The focus groups were held in a room in the local university premises and all were recorded and subsequently transcribed. Questions were asked about their views of the facilitators and barriers to recruiting men into nursing and the challenges male students experience while at University (Appendix 6). Consent was sought before the start of the focus group (Appendix 7). A total of 21 university and further education college lecturers took part in 4 focus groups. Table 2 gives details of numbers and locations.

Table 2: Focus groups with university and further education college lecturers - number and location of focus groups and students

	Number of Focus Groups	Number of University and FE College Lecturers	Male: Female
University of Dundee	1	6*	2:4
University of Edinburgh	1	3	2:1
University of West of Scotland	1	4	1:3
Robert Gordon University, Aberdeen	1	8	2:6

* Including FE College Lecturers

Secondary school careers advisors and guidance teachers (Phase five)

Phase five involved an online survey which was sent to secondary school careers advisors and guidance teachers throughout Scotland. An email invitation to participate was distributed to local contacts. The survey was open for responses from 27th February to 31st March 2018. The questionnaire consisted of 4 open questions which were derived from the aims and objectives of the project (Appendix 8). The questions were open to encourage participants to express their views freely. A total of 46 teachers participated from across Scotland: Aberdeenshire and Aberdeen City (27), Dundee and Angus (12), Edinburgh (1), Glasgow and Lanarkshire (6). Respondents worked in variety of roles: Head Teacher/Deputy Head Teacher (8), Guidance teacher (15) Careers advisor (4), Care and support/pastoral care (14). There were 36 female respondents, 8 male respondents, and 2 who preferred not to say.

Qualitative data analysis

The data from phases three, four and five were analysed together. All data from focus groups were recorded and transcribed verbatim. The transcribed data from the focus groups with both students and staff, and the written responses from the qualitative survey of teachers were combined and analysed as described below.

The analysis of the qualitative data was driven by common processes in all qualitative data analysis: compiling, disassembling, reassembling, interpreting and concluding (Yin 2016), although progress through these phases was not linear or unidirectional. In the compiling phase a data base using NVIVO 11 software was created and transcripts of the focus groups were. Three data clusters were created: Student Nurse, Academic Staff and Career Advisors/Guidance Teachers. The data clusters were disassembled or coded using NVIVO 11: this iterative process continued as more data became available. The use of NVIVO 11 mind maps helped to visualise and formulate the links between codes and therefore helped

progression to the reassembling phase. In this stage patterns within the data were discerned. The mind maps were used to represent these patterns as hierarchical array. In the interpreting phase all the data was brought together and comprehensively interpreted whilst still ensuring a fair representation of the data. This interpretation sought to describe and where possible explain the emergent themes (Yin 2016). Finally an overarching conclusion was reached bringing together both quantitative and qualitative data and capturing the broader significance of the project.

The rigour or trustworthiness of the qualitative findings was derived from the prolonged engagement with participants and the breadth and depth of data collection, which continued until saturation point was confirmed. Open questions were asked to prompt discussion in the focus groups but not to lead the responses. Triangulation was achieved by gathering data from three different data sets and the analysis thereafter produced similar themes. The transcription of all data and the diligent constant comparison process from which the themes emerged also ensured the validity of the findings. The emergent themes and nomenclature were then refined after debriefing and exposure to critical discussion by the entire project team who had all participated in data collection.

Consensus building event (Phase six)

Finally, for phase six, a consensus building event was held on 27th March 2018 in Stirling from 12.00 – 16.00. Policy makers, HEI representatives, nurse leaders, clinical staff, from across Scotland were invited by email using existing contacts. A total of 53 people attended the event. Attendees included University lecturers (25), Further Education College lecturers (15), students (9) and others (4). There were 21 male and 31 female attendees. The areas represented included: Aberdeen and Tayside (14), Edinburgh and the Borders (8), Glasgow and West of Scotland (18) and unknown (13).

The information gathered during the preceding phases was presented and participants worked in groups to discuss and comment on the findings. Groups were arranged deliberately into a mix of people from different backgrounds (academic, clinical, student) and geographical areas. The groups were then asked to develop recommendations and actions to address the identified issues using flip-charts. Participants then circulated round the room to consider the recommendations suggested by all the other groups and 'voted' using post-it notes for their favoured recommendations.

Ethical approval

Ethical approval was gained for all phases of data collection:

- University of Dundee SREC numbers: 2017010_Eccles (Student nurse focus groups); 2017034_Whitford (Lecturer focus groups); 2018004_Whitford (Guidance Teachers questionnaire);
- University of Edinburgh: STAFF099 (Student nurse focus groups); STAFF103 (Lecturer focus groups)
- University of West of Scotland Ethics committee reference number: 2017-2141-1631
- Robert Gordon University SERP Reference number: 18-04

Results

The results of each phase of the study are presented separately.

Literature Review Results (Phase one)

The initial database search produced 1936 citations after de-duplication. After screening titles and abstracts, 1897 were excluded as they did not meet the inclusion criteria. The primary reasons for exclusion at this stage were that the article did not report original empirical research, the article focused on the experiences of men working as registered nurses or the topic was unrelated to the research question.

Of the 40 full-text papers eligible for retrieval, one could not be accessed (Sedgwick and Kellett, 2015). Thus a total of 39 full text articles were screened and from these a total of 15 met the inclusion criteria. The remaining 24 studies were excluded for the following reasons: not conducted in a Western country (n=10); not an empirical study (n=6); focused on experiences of men working as nurses (n=4); participants were psychology students (n=1); focused on gender bias in marking (n=1); focused on the gender pay gap in nursing (n=1). Also of note is one additional study that was conducted in the UK and described an on-going study. As the full results were not available, this study was also excluded from the review (Whittock and Leonard, 2003).

In addition the search of the reference lists identified an additional five citations reporting on four distinct studies. The full-text for one of these records could not be obtained (Baker, 2001), however, the other four citations for three distinct studies did meet the inclusion criteria. Therefore a total of 19 papers reporting on 18 distinct studies were included in this evidence review. See Figure 1 for study selection flow diagram for illustration of the process.

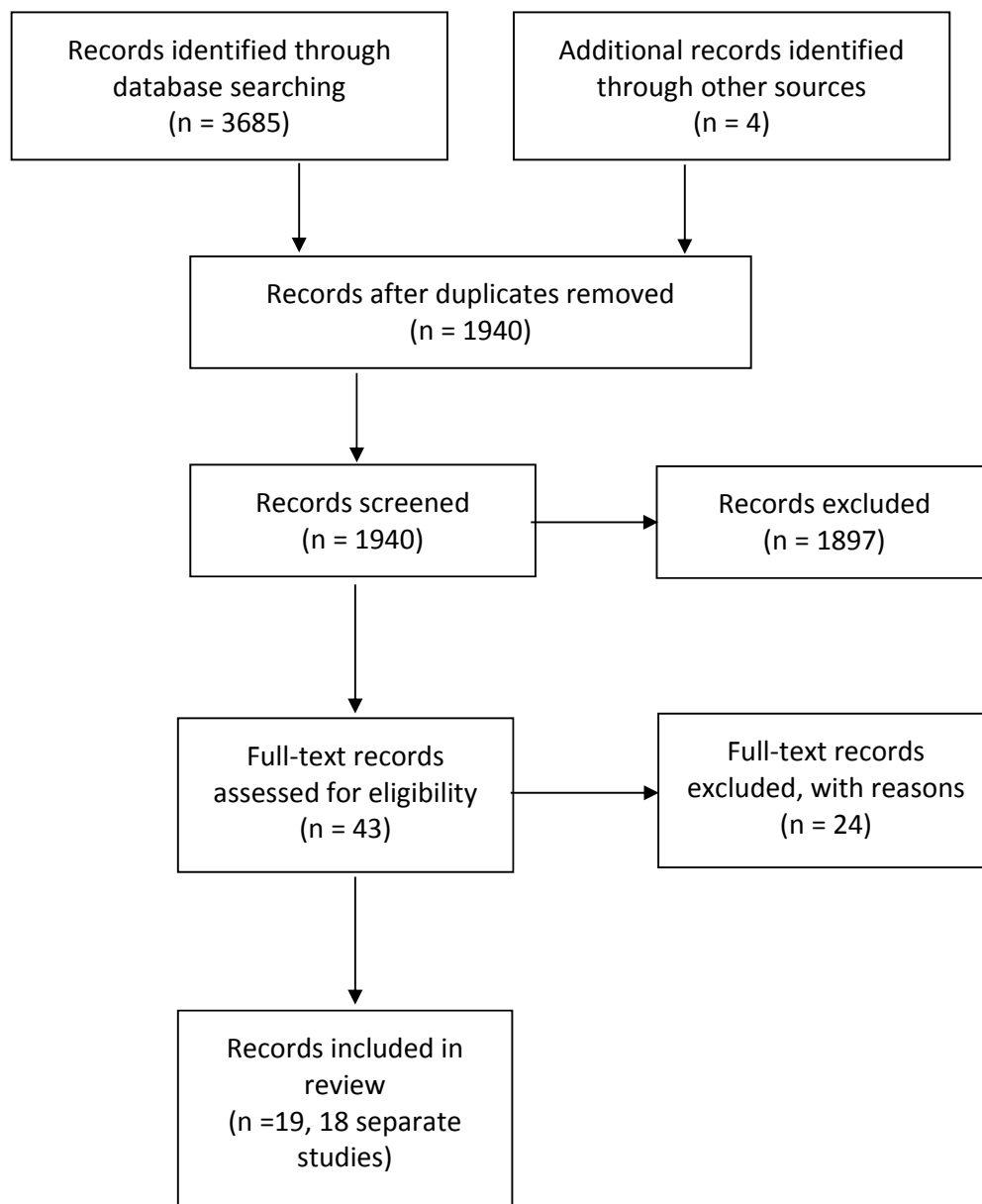


Figure 1. PRISMA flow diagram detailing study selection process.

Characteristics of included studies

All included studies were peer reviewed journal articles, with the exception of Anderson (2014) and Tillman (2006), which were dissertations. The characteristics of the included studies are summarised in Appendix 9.

Geographical location

All of the included studies were conducted in English speaking countries. However, only one study (reported in two papers) was conducted in the UK (Muldoon and Reilly, 2003,

McLaughlin et al., 2010). Almost half of the studies (n=8) were conducted in the USA (O'Lynn, 2004, Smith, 2006, Bell-Scriber, 2008, Ierardi et al., 2010, DeVito, 2016, Anderson, 2014, Ellis et al., 2006, Tillman, 2006). The remaining studies were conducted in non-European Western countries: four studies were conducted in Australia (Wilson, 2005, Kermode, 2006, Stott, 2007, McKenna et al., 2016); three studies were conducted in Canada (Meadus and Twomey, 2011, Bartfay et al., 2010, Bartfay and Bartfay, 2007); and two studies were conducted in New Zealand (Harding et al., 2017, Christensen and Knight, 2014).

Half of the included studies only included male nursing students and specifically aimed to explore men's experiences of nursing programmes (Christensen, 2014, De Vito, 2016, Ellis et al., 2006, Harding et al., 2017, Ierardi et al., 2010, Meadus and Twomey, 2011, Smith, 2006, Stott, 2006, Wilson, 2005). A further two studies included registered male nurses, however, as the focus was on their pre-registration nursing education they were included in the study (O'Lynn, 2004, Tillman, 2006).

Five studies (reported in six papers) included male and female nursing students and either considered both male and females' experiences of education or motivations to study nursing (Anderson, 2014, Bell-Scriber, 2008, McKenna et al., 2016, Muldoon and Reilly, 2003, McLaughlin et al., 2010) or examined attitudes towards male nursing students (Bartfay and Bartfay, 2007). Similarly, Bartfay and Bartfay (2007) also explored attitudes towards male nurses in male and female nursing and non-nursing students and Kermode (2005) included male and female nursing and non-nursing students to examine perceived sexism in University courses.

The majority of studies were focused on undergraduate pre-registration programmes, however, some of the students on these programmes already held undergraduate degrees. However, two of the more recent studies specifically focused on pre-registration post-graduate programmes (McKenna et al., 2016, Harding et al., 2017). McKenna et al. (2016) reported that 30% of participants were male which suggests that a higher rate of male participants were undertaking a post-graduate programme. Harding et al. (2017) do not report the rate of male students on their programme.

Study Design

The majority of included studies utilised qualitative designs to explore experiences of nursing students. This generally took the form of interviews (Anderson, 2014, Bell-Scriber, 2008, Christensen and Knight, 2014, Ellis, 2006, Harding et al., 2017, Ierardi et al., 2010, Stott, 2006, Tillman, 2006, Wilson, 2014) however, in some cases focus groups (Meadus, 2011) or written accounts (DeVito, 2016) were used.

Studies conducted cross-sectional surveys to either identify the prevalence of barriers to men in nursing (Kermode, 2005, O'Lynn, 2004), examine characteristics of men entering nursing programmes (Harding et al., McKenna et al., 2016), examine attitudes to men in nursing (Bartfay and Bartfay, 2007, Bartfay et al., 2010) or examine how gender can influence career progression (Muldoon and Reilly, 2003, McLaughlin et al., 2010).

Critical Appraisal

The qualitative studies were generally of an acceptable standard, however, only one study (Tillman, 2006) scored 'yes' for all the domains on the CASP tool. The most common issues were a lack of consideration of the relationship between researcher and participants (identified as an issue in 8/11 studies) and inappropriate recruitment strategy (identified as an issue in 4/11 studies).

The cross-sectional studies were generally judged to be of a low standard using the AXIS tool. The main issues were lack of justification of the sample size (identified as an issue in all studies); lack of categorisation and information about non-responders (identified as issues in all studies); insufficient description of the statistical methods (identified as an issue in 5/7 studies); concerns about response rates (identified as an issue in 5/6 studies); using non-validated measurement tools (identified as an issue in 4/7 studies) and lack of information on internal consistency of measurement tools (identified as an issue in 4/7 studies).

The one mixed-methods study (Smith, 2006) was judged to be of a high standard using the MMAT tool.

Study Findings

The findings of the studies were analysed thematically and synthesised to answer each of the review questions and are summarised below.

What are the barriers and facilitators to recruiting men to pre-registration nursing courses?

Evidence from the included studies suggests that many men who come into nursing have a family member or acquaintance who worked as a nurse (DeVito, 2015, Harding et al., 2017, Meadus and Twomey, 2011, O'Lynn, 2004, Tillman, 2006, Wilson, 2005). Alternatively, men might have come into contact with male nurses either as a recipient of care or as the family member of a care recipient (Ellis, 2006, McKenna et al., 2016, Wilson, 2014) or through previous employment (e.g. in the military; Ellis, 2006, Harding et al., 2017, Tillman, 2006). Many of the men had had a previous career and were not school leavers (Wilson, 2005). Indeed, men felt there was a lack of school leavers on the course and this was reflective of failures of school counsellors to suggest nursing, negative peer pressure and a bias in favour of male dominated professions (Meadus and Twomey, 2011, Smith, 2006, Wilson, 2005). However, it should be noted that societal influences were not restricted to school leavers with more mature students also identifying this as an issue (Bartfay et al., 2010, Harding et al., 2017, Meadus and Twomey, 2011, Smith, 2006, Wilson, 2005).

Another consistent finding was that men perceived nursing to be a career that provided both financial security but also opportunities in terms of career progression and mobility (Christensen et al., 2014, DeVito, 2015, Ellis, 2006, Harding et al., 2017, Ieradi et al., 2010, McKenna et al., 2016, Meadus and Twomey, 2011, Tillman, 2006, Wilson, 2005). This was of particular importance to men who were experiencing difficulties in seeking employment (Christensen et al., 2014, McKenna et al., 2016) or dissatisfied with their current roles (Harding et al., 2017). Another important factor in the men's decision to study nursing was the opportunity to work in what the participants perceived to be a caring profession (Harding et al., 2017, Ieradi et al., 2010, McKenna et al., 2016, Meadus and Twomey, 2011, Stott, 2006, Tillman, 2006).

No evaluations of any strategies designed to increase male recruitment into nursing were identified by the evidence review. However, a number of strategies/facilitators were identified by the participants as potentially being of use. First, participants felt the following strategies may help specifically help encourage school leavers to apply directly for nursing: support and education for family members and high school counsellors; school visits by male nurses to talk to students; marketing of courses in an androgynous manner (Wilson, 2005). Secondly, specific to graduates, graduate courses were viewed as particularly appealing as they tended to be shorter, were more financially attractive and provided an additional qualification (Harding et al., 2017). Thirdly, other strategies to encourage men more generally to apply were reported to be careers fairs that did not specifically focus on female students (Meadus and Twomey, 2011), involvement of men at career open days (DeVito, 2015) or recruitment campaigns directed specifically at men (DeVito, 2015). Finally, as many of the men cited financial security, career mobility and the opportunity to have a job in a caring profession as motivating factors, these could be considered for inclusion in marketing materials.

What are the experiences of men on pre-registration nursing courses whilst on theory and clinical placements?

The men in these studies reported both positive and negative experiences on theory and clinical placements. In terms of positive experiences, there was some evidence that the participants enjoyed being able to put what they learnt from theory placements into a practical setting (Wilson, 2005). Other men felt that being male did not hinder their progress (Smith, 2006) and they felt accepted and treated positively on clinical placements (Wilson, 2005). In particular, participants reported feeling more comfortable in clinical placements where more male nurses worked such as accident and emergency, surgery (DeVito, 2015). Generally, participants in the included studies did not experience issues with treatment refusal from patients. However, occasionally female patients would ask for a female nurse when requiring intimate care, in particular older women wards (Anderson, 2004, Christensen and Knight, 2014, Smith, 2006, Wilson, 2005).

However two areas of clinical practice did consistently raise issues for the male students, with studies consistently reporting that men had difficult experiences during clinical placements on Obstetrics and Gynaecology wards because of a higher rate of treatment refusal (Anderson, 2004, Christensen and Knight, 2014, Ellis, 2006, O'Lynn, 2004, Smith, 2006, Stott, 2006, Wilson, 2005). Similarly, some men reported that they could feel uncomfortable in paediatric placements (Meadus and Twomey, 2011). In particular, some participants described feeling anxious that female patients could feel uncomfortable or make accusations about inappropriateness when providing intimate care (Meadus and Twomey, 2011, O'Lynn, 2004).

Christensen and Knight (2014) contrasted this to female students' experiences where it was usually a non-issue when female students provide intimate care for male patients and importantly this could cause male students more difficulties in identifying patients for performing required competencies.

Several studies reported that during the course, some men could find being in an all-female environment difficult at times (Meadus and Twomey, 2011, O'Lynn, 2004, Wilson, 2005) and this could result in feelings of isolation (Stott, 2006). Being one of a few men also meant that men experienced disproportionate burden of some roles. In particular, during theory placements men could feel pressured to act as a simulated patient by other students and teaching staff, in particular for sessions where the chest was exposed (Anderson, 2004, Stott, 2006, Wilson, 2005). Whereas during clinical placement they were considered to be "muscle" and their role was undertake heavy lifting (Meadus and Twomey, 2011).

Wider gender stereotypes could also play a role in contributing to negative experiences. In particular, some men reporting feeling that some female nurses or wider society viewed them as less caring or in a negative manner (Bartfay and Bartfay, 2007, Meadus and Twomey, 2011, O'Lynn, 2004, Stott, 2006, Wilson, 2005). In addition, male nursing students were not infrequently mistaken for being a medical student (Anderson, 2004, Ieradi et al., 2010, Meadus and Twomey, 2011, Stott, 2006). Finally, some studies reported that the course generally did have a feminist bias which could lead to feelings of discrimination for some students (Bell-Scriber, 2008, O'Lynn, 2004, Kermode, 2005).

What are the barriers and facilitators to retention on pre-registration nursing courses?

Facilitators to retention could be broadly divided into facilitators that could be implemented by the university and wider facilitators (external to the University). University based facilitators could then be further divided into the following categories: attitudes and behaviours of university/clinical staff; peer relationships; and course structure. First, this could include ensuring students received support and positive feedback for faculty, clinical staff or patients (Meadus and Twomey, 2011, Ieradi et al., 2010, Wilson, 2005) and equitable treatment by faculty (Anderson, 2004). In one study, participants felt that their University had a genuine acceptance of male students and this was evidenced by the University's attempts to increase the number of male students (Anderson, 2004). Interestingly, students did report that being male could make them feel under the spotlight during theory and clinical placements (i.e. it was noticed if they were not there, tutors knew their names to ask questions), however, for some students this was seen as positive as it encouraged them to work harder.

Secondly, peer relationships could also play an important role. Having another male student in the class was reported to be of benefit for some students (Anderson, 2004, Meadus and Twomey, 2011). Similarly, developing positive relationships with female students also acted as a facilitator (Anderson, 2004, Bell-Scriber, 2008, DeVito, 2015, Ellis, 2006). And several studies suggested that opportunities for male discussion/support meetings could be of benefit as this could enable male students to discuss what it is like being a male nurse in a female dominated profession (Stott, 2006, Wilson, 2005).

Finally, men tended to displayed a preference for more technical and specialised areas of nursing (DeVito, 2015, Ellis, 2006, McLaughlin et al., 2010, Stott, 2006) so clinical placements in these areas could potentially help improve experience and facilitate retention. In addition, Harding et al. (2017) specifically looked at shortened postgraduate programmes and identified that the male participants particularly enjoyed the challenge of

a postgraduate programme and being able to undertake a shortened programme was a strong motivating factor.

Despite many of the men from these studies reporting positive experiences, McLaughlin et al. (2010) identified that men from a University in Northern Ireland were more likely to withdraw from the course than women (28.1% versus 10.7%). Again barriers could be divided into barriers related to the University and wider barriers.

Specific to the University, some men reported that negative staff attitudes towards men and behaviours could have an impact (Bell-Scriber, 2008, O'Lynn, 2004). In addition, course materials could be gender biased as evidenced through exclusive use of women in textbooks and gender stereotyped language (Anderson, 2004, Bell-Scriber, 2008, Christensen and Knight, 2014, DeVito, 2015, Ellis, 2006, Ieradi et al., 2010, O'Lynn, 2004, Smith, 2006). In addition, one study reported that male students could have more difficulties with the high volume of reflective writing on many nursing programmes (Christensen and Knight, 2014). Other commonly reported issues included a lack of male faculty or role models on clinical placement (DeVito, 2015, Ellis, 2006, O'Lynn, 2004, Stott, 2006, Smith, 2006) and lack of other males on the course (Anderson, 2004, DeVito, 2015, O'Lynn, 2004). As noted previously, this could lead to students feeling like they stood out and for some this was viewed negatively and as a barrier as it meant they felt under more pressure to answer questions during class (Anderson, 2004, Christensen and Knight 2014, DeVito, 2015, Ellis, 2006, Meadus and Twomey, 2011).

External barriers included financial constraints, maintaining a work life balance and difficulties returning to study after a break (Ellis, 2006, Smith, 2005, Wilson, 2005). Whilst these can impact on female students too, they impact may be disproportionate for male students who were more likely to be older. Another external barrier included having unsupportive friends who would make homophobic or gender stereotyped remarks (Bell-Scriber, 2008, DeVito, 2015, O'Lynn, 2004, Wilson, 2005).

Data about recruitment and retention rates of males to all pre-registration nursing programmes in Scotland in the past 5 years (Phase two)

National data requested from NES for the above period was actually supplied for 10 years (for the period 2006-2016) and shows that the gender composition of pre-registration cohorts in Scotland has remained fairly consistent with ten year averages of 9.2% for males and 90.8% for females.

Recruitment rates

Data for each of the four institutions directly involved in the project (University of Dundee, University of Edinburgh, University of the West of Scotland and Robert Gordon University) was also requested from NES. This data shows that the composition of pre-registration cohorts on ordinary degree programmes varies across institutions, being lower than the national average for Robert Gordon (6.0% male) and above the national average for the University of the West of Scotland (10.1% male) (Table 4). The average for the University of Dundee is 9.2% male. For honours degree programmes, data from Robert Gordon and the University of Edinburgh indicate the gender composition on their programmes is below the national average at 7.4% males and 7.5% males respectively. The University of Dundee which introduced an honours degree programme in 2016 is above the national average for that year's cohort at 11% males on programme.

Table 4: Composition of pre-registration cohorts by gender

Institution	Ordinary degree programme		Honours degree programme	
	Male	Female	Male	Female
Robert Gordon	6.0%	94.0%	7.4%	94.2%
Edinburgh	-	-	7.5%	93.6%
Dundee	9.2%	90.8%	-	-
West of Scotland	10.1%	89.9%	-	-
National data (Scotland)	9.4%	90.6%	9.2%	90.8%

Source: NES

Data requested for the percentage of males on ordinary degree programmes by year was provided for the period 2003-2016 and shows a fluctuating picture from year to year for each institution offering an ordinary degree programme; Robert Gordon (4-8%), University of Dundee (7-13%) and the University of the West of Scotland (7-12%). There is similar fluctuation from year to year at institutions which offer an honours degree programme; Robert Gordon (0-14%) and the University of Edinburgh (0-15%).

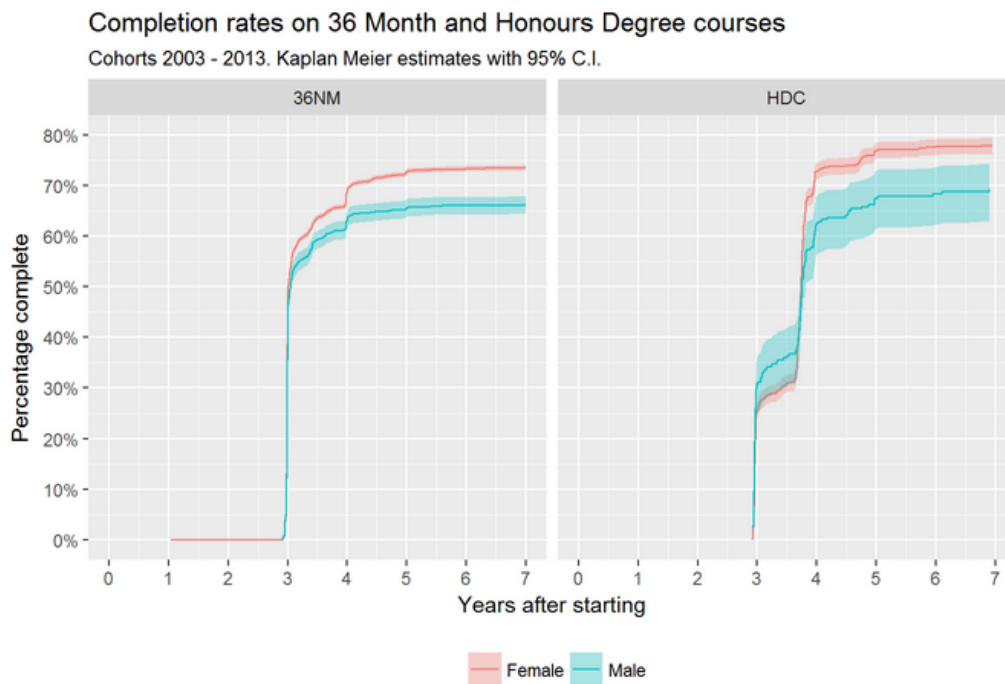
It was not possible to gather data about the proportion of men in the different fields of nursing, or in pre-registration MSc programmes.

Retention rates

Data about completion rates indicates that for ordinary degree programmes males have lower completion rates than females at all time points after starting their course (Table 5). At 3.5 years there is an approximately 5% point difference between males and females which has increased to 7% by 5 years. For honours degree programmes completion rates after 4 years are lower for males and a greater proportion of males (~7%) complete the programme early by exiting at 3 years (presumably with an ordinary degree).

Data also indicates that males are in general slower to complete and are more likely to take time out of their programme than females.

Table 5: Completion rates for all programmes



Source: NES

Qualitative results: Views, experiences and attitudes to men in nursing in Scotland:

The qualitative results are presented separately by participant group. Quotes use 'S' for students, 'L' for university and college staff, 'T' for guidance teachers and career advisors and 'I' is used for the interviewer. Identifiers relating to the area of Scotland are not included to preserve anonymity.

Student Nurse Focus Group Results (Phase three)

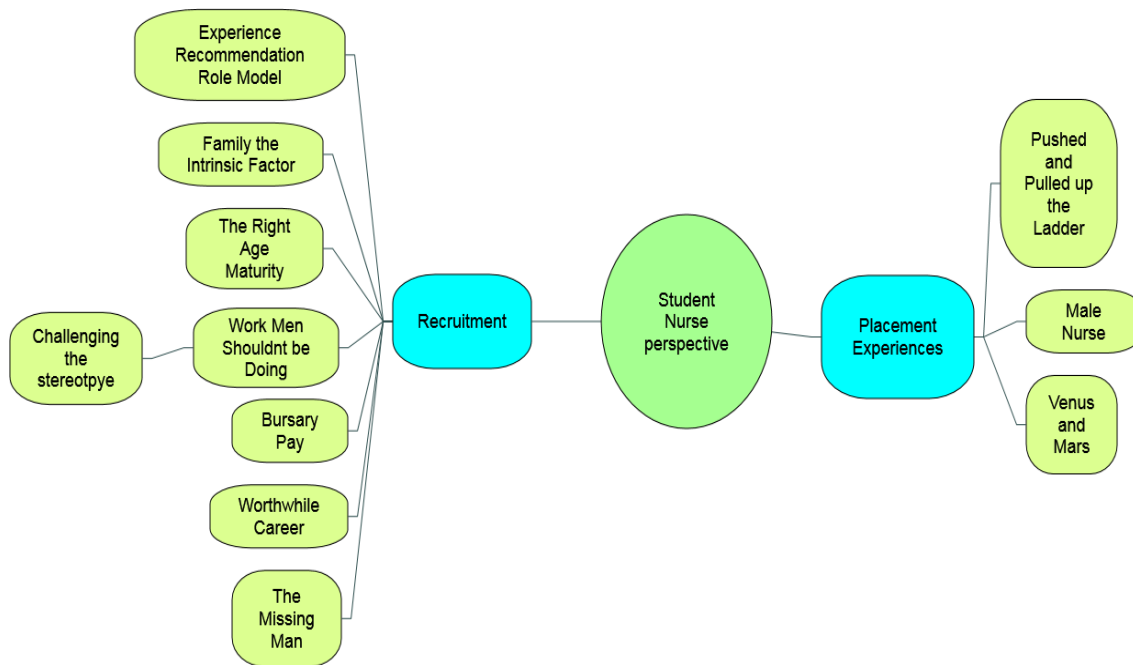


Figure 2. Summary of student nurse results

The themes which emerged from the student nurse data analysis fall naturally into the overall categories of Recruitment and Placement Experiences (Figure 2). The Recruitment category relates to themes surrounding recruitment of men into nursing and the Placement Experiences category relates to themes emerging from their experiences on the pre-registration programmes, particularly those whilst on practice placement.

Recruitment

Work men shouldn't be doing

Overall the analysis of qualitative data shows a distinct dichotomy that, despite nursing being perceived as a worthwhile career with varied progression opportunity and geographic mobility, the strong implicit societal link of nursing and femininity, deters male recruitment and effects nursing practice for men.

S16 *My dad wasn't happy about me taking the job in the hospital at first, just because he thought it was work that I shouldn't be doing.*

I: *Did he vocalise that to you?*

S16: *Yes. We had a massive argument about it. My dad's 35 years in the motor trade as well, been a mechanic all his life, and didn't expect – I don't know why he had a problem with it because nobody else had had a problem with it but he didn't see that as being a type of work he expected me to do.*

The societal perception that nursing is a feminine occupation and is essentially 'work men shouldn't be doing' emerged consistently as a theme in the student nurse focus groups. The view that nursing is a 'female job' and is not suitable work for men influenced both the decision making process to take up nursing, and also the choice of branch.

Family the intrinsic factor

In this study the inherently altruistic and socially worthwhile nature of nursing has appeal for men, and this was related to the family and the 'intrinsic factor' within personality that draws people to a caring role.

S2: *I said it in the interview as well – it seems to run in my family, I don't know about anybody else's but it always seems to be a bit of a familial thing. I sometimes just think it's kind of in you to do it or not. It's one of those things where you can be taught all the theory behind it but I don't think that would actually be enough. You have to have that something inside you, whatever it is.*

Worthwhile career

Although nursing was also seen as an attractive career because of its relative security and stability, the desire to be part of a caring profession emerged with more primacy as a recruitment motive from the student nurse data.

S10: *I'd always considered doing it after my first degree in management. I was in my final year and I always thought about doing nursing. At the time, I thought I'd just go and get a graduate job and get some experience, get some money, in that field, but as I worked in that role for 10 years, I considered doing something that was going to be beneficial to others and I wanted something that was going to be a worthwhile career, something that I could look back on and say I've helped people, and that was something that drew me to the course. It was just more of my personality I would say and help others.*

Nevertheless nursing in this study was also perceived as a worthwhile career because of its comparative stability, security and breadth of opportunity.

Challenging the stereotype

In this study as data was gathered from men who had moved on successfully with their application to pre-registration nursing courses, there was a consistent theme of these men seeking to be change agents and challenging the stigma attached to men in nursing. Often

they had done this personally and there was a felt need for the profession of nursing to also work towards this aim.

S5: *But I think it's important to be the change you want to see so if we want to get rid of stereotypes and get more men in nursing then you just have to go for it and don't think what other people are thinking of or...*

Experience, recommendation, role model

Discontent with previous jobs and recent experience with either health or social care seemed to lead towards the decision to apply for pre-registration nurse training, as did the influence of a significant role model. Often within the focus groups, nursing as a career choice was based on recommendation from others who seemed to discern the participant's potential and provide motivation and encouragement. The higher national certificate (HNC) students in the groups suggested that their pathway provided this advantage. Having a family history in nursing, not necessarily but perhaps particularly if this includes male relatives, seems to encourage men to apply for pre-registration nursing. Associated with this idea is the view that the qualities needed for nursing are personal and intrinsic.

S26: *I had one in my last job, a support worker in a place with people with mental health issues, varied ages. And I worked there three years, and done my SVQ 3 there, and my manager had said to me for about two years "you know, you should just apply for your nurses training because you've got the nature for it." And I said "I'm quite happy just helping people." But the more that I was in the job, the less I felt that my voice was heard as a support worker. I was a senior carer as well for a while, and I just felt like it didn't matter what you said, it fell on deaf ears. But if a nurse said it that was different, like "that needs done." And I'm like "that's incredible." And because my manager kept saying to me, they did say to me that when I qualify they'll get a position for me there if I want it, and I'm like "well, at least there's a job opportunity after it." And if it is a line of work that I look to go into, because my dad took not well, and I thought "why not? I may as well try for it."*

The 'right' age, maturity

The view was expressed consistently in the student focus groups that men take longer to mature than women, and therefore take longer to realise that nursing is a suitable career for them and reach the right age or maturity to be ready to grasp the opportunities available.

S14: *I would have laughed. If you told me at 18 when I was leaving school that I would choose to be a nurse 10 years down the line, I would have laughed at you.*

Maturity was also seen as a resilience factor in overcoming the female stereotype of nursing. If men are defined by their peers as too old however, then they may attract prejudice with some questioning their motives and viewing them as 'seedy.'

The missing man

Despite the high profile of men on pre-registration nursing course committees, recruitment prospectus information for nursing was seen by participants to be dominated by female images.

S9: *I kind of expected a bit more because I think that the males that are in the course tend to be a lot more involved with the course. I think there's a higher percentage of males that are class reps or on certain committees. I've just went for school president so I'm doing that this year. I'm taking over from a male who took over from a male who took over from a male.*

I1: *In the last six years there's been one female.*

I2: *So you engage when you get here, is what you're saying?*

S9: *Yes. I expected to see that it was – but it doesn't really translate to the website because they're not in the pictures.*

Nevertheless students in the focus groups, whilst not wanting the men to be absent from recruitment material did not want prospectus information to project the idea that men were overly represented in the pre-registration course as they felt this would be unreal and misleading.

Bursary pay

The data in this study emphasised that the financial incentive of bursary support throughout pre-registration training was a significant factor in recruitment decision making. Fears over the removal of bursary payments, in Scotland as in England, however were raised. Whilst financial constraints also affect female students, the men in the focus groups felt that the impact may be disproportionate for male students, particularly those who are mature and who are still traditionally viewed as the 'breadwinner.'

S20: *It will certainly affect any mature students. If you're like myself and you do this in your 30s, I've got two children, a partner, a mortgage, I simply could not have afforded to have done this without there being a bursary.*

The perception of low earning potential in nursing was also a significant recruitment factor.

Placement Experiences

Pushed and pulled up the ladder

Male identity and self-image may also drive career aspirations and ambition, 'pulling men up the ladder of promotion' within nursing. This ambition seems to mitigate against the stigma of 'doing a woman's job.'

S6: *If you want to do the woman's job, you need to be doing it at a high level, which is why I think you see so many male charge nurses and stuff. Because it might be that it's the idea that it's not okay to be at the same level as the woman, in the*

woman's job, you've got to be better at it. I think that's a view that a lot of people have, and that's the masculinity thing coming into it. So, it's about, like, recapturing the role of a normal nurse as being a masculine job and not just a feminine one.

This perspective seems to be also consistently reinforced by female nursing staff during practice placements who may have a role in 'pushing men up the ladder of promotion'.

I: *I know what you mean. They're seeing potential in you and that gives you encouragement.*

S6: *Yes. But I think a lot of that is gender-based. That's what I'm trying to say. They expect men to want to go up the ladder, whereas the female students I have been on with, they've never had conversations where it was like, 'When you go into your PhD,' or, 'when you decide to specialise,' that's just not a conversation- it seems to be a throwaway comment that they'd say to the male students.*

It was also expressed consistently in the MSc student nurse focus group that to be acceptable to men, nursing should also be seen as academically challenging in line with other degree courses and therefore the Masters route helped to fulfil this expectation and need.

Venus and Mars

A distinct difference in gender-based communication patterns was perceived by the male students. This related to style and content of communication.

S2: *Male nurses are generally more chilled. They're probably panicking on the inside.*

S3: *They don't show panic.*

S1: *Women do generally talk a lot more than men do anyway. They will talk about all the things going on whereas I have noticed actually when I have been on shift and there's been a male nurse on, they do seem to be the ones that are a bit more calm.*

S5: *Just in the background saying nothing. Just being there if you need them.*

It also emerged consistently that a mixed gender nursing team tended to have a tonic effect on the group dynamic.

S19: *That is a very good point. I've had a lot of positive feedback from the fellas, and from a lot of the ladies as well. But you can have a bit more of a rapport with a gentleman, you can talk about stuff, your football or whatever, stuff like that. Some sort of gender-specific stuff.*

These gender-based communication differences were felt to be positive because they enabled ease of communication with patients from both genders. They provided a rationale for a mixed gender nursing workforce.

Male nurse

In the focus group data nursing was seen to accord implicitly, unconsciously and strongly with the female stereotype. It is therefore still common parlance to use the term 'male nurse' as if there is a need to emphasise that it is possible to be both a man and nurse. It is however seen as unnecessary to ever say 'female nurse' because this is assumed to be the natural order of things. The terms 'lady doctor' and 'male nurse' are still used and convey the underlining societal assumption that medicine is for men, and nursing is a female domain. One student captured this perspective perfectly with a story about a visit to the local chip shop.

S18: I went out to a chip shop and I was with four of my friends, all of which do medicine and they're all female, and he went "oh, you're from the University of X" and we said "yes, yes, yes."

And they all said "medicine, medicine, medicine..." and it got to me and I said "nursing."

And he got the person through from the back and he said "look how times have changed, he's the nurse." And he wasn't saying that in a positive way, he was going "look at this..... WHAT?"

The use of language reinforces the gender-based employment hierarchy even when women are entering traditionally male roles. One student expressed this eloquently and implied that men who enter traditionally female roles face this societal expectation in reverse, and may have more difficulty holding on to their masculine identity.

In this study some men pursued nursing as a career choice despite family and perceived societal pressure against this decision and some men took up specific fields of nursing, specifically mental health nursing, at least partly because they perceived this to be more in accordance with the male stereotype. Often these men anticipate that there will be difficulties with giving intimate personal care to women. Caring for children in a professional nurse capacity was also felt to be problematic and against the male stereotype.

S30: I think I'm asked a lot as well why I didn't choose mental health. Part of that is maybe to do with I've got the background where I speak to people in the homes, or the other half kind of is, you know, because I'm a man, 'Why aren't you in mental health?' 'Why aren't you in that kind of nursing?' There's someone else I know who's a male in nursing, just child nursing, and he finds he's asked that a lot more. 'Why children and why not mental health?' it always seems to be the go-to one.

It also emerged strongly that the masculine stereotype seemed to overrule the professional imperative in terms of acceptability for men to provide intimate care to female patients. Meaning that male nurses were seen primarily as men rather than professional care givers who could work with either gender. One participant referred to a sage piece of advice which is particularly resonant.

S6: *I think it's primarily still looked at as being a female role. I looked on websites reading up about nursing before I started to go into nursing, and a few things that you think about is what happens if you're dealing with female patients with dignity and things like this, and the best piece of advice I read online was from a male nurse and he said that when he was doing his training it was a bit of advice passed down to him and he said he'd pass it on. And it was whoever you're dealing with, but mainly if it's female you're dealing with and there's dignity involved in that, just make sure that you always promote yourself as professional, never look worried and nervous about what you're doing, always portray yourself as professional, which puts them at ease. You may not have been in it for long, because as a student nurse you're quite new to it, but to them it portrays that you're comfortable with it, and if you're comfortable, they're comfortable, so it puts them more at ease. So I think there's a lot, because it's generally looked as a female role and you've got the issues of male and female that you're dealing with.*

Problems with the converse situation were not held to be prevalent. It was found in this study that mentors often asked permission from female patients for male nurses to provide care but never asked male patients the same with regard to female nurses. In the next section, the data analysis of academic staff, this issue emerged more explicitly.

University and Further Education College Nursing Lecturer Focus Group Results (Phase four)

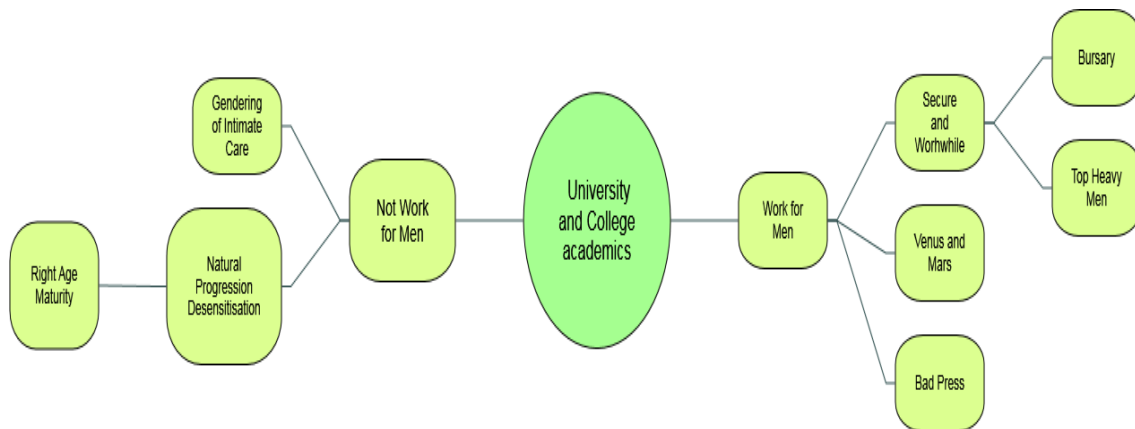


Figure 3. Summary of academic staff results

The themes identified in the university and further education college nursing lecturer focus groups were often similar to those in the student data (Figure 3).

Not work for men/work for men

The distinct dichotomy that nursing was suitable for men but also perceived in society as mainly work for women was paramount in the staff discussions.

L5: *In my experience, society still does have a bit of a difficulty, I think less so now, but still has a bit of a difficulty with men in nursing. The whole concept of it being referred to as a male nurse. "He's the male nurse".*

Secure and worthwhile

As an antidote to this it also emerged that for recruitment information, staff thought that emphasis should not be on an image of nursing excluding men. It should rather be on the skills required of the nurse such as logical problem solving, technical ability and knowledge of science which may have natural appeal to men. The employment security of nursing was seen in the academic staff focus groups to be attractive to men because of its inherently worthwhile and socially beneficial nature. This stability and security was seen in discussion as particularly vivid in the context of the continuing decline of heavy industry and traditional sources of employment for men. For example the downturn in the oil industry for a while led to more men turning to nursing as an alternative career.

L18: *I think it's a career change for a lot of people, a lot of men, because it's mature men that generally come in, rather than school leavers. So it's about they've maybe been in other professions or industry, and that's not doing so well and that's a decline, and then we see them come in because of stability, pensions, lifelong learning, lifelong career.*

There was agreement that in order to boost the recruitment of men into nursing that more should be made of not only the security of nursing as a career but also its variety and flexibility. However these effects can be variable and there was some discussion that with the oil industry picking up again, that this source of economic migration of men into nursing may not continue. Again similar to the student nurse focus groups it emerged that a popular route into pre-registration nursing for mature men is still the HNC route in feeder colleges.

Venus and Mars

As in the student nurse data it was felt that having men in nursing was beneficial and that this stemmed from the gender difference.

L3: *Because that's seen as such a maternalistic profession to go into, caring for children, that's what ladies do. Again, we're going back to the old fashioned views. But my experience of being a male nurse in paediatrics is that not all kids like women, not all kids like men. And I think having a good gender mix within the working environment was beneficial to the patients, definitely. Think about it, boys coming in with some quite personal stuff, they don't want a woman going anywhere near them and actually quite appreciated having that.*

L2: *From care of the elderly perspective, I would say a lot of the older female residents that we looked after were delighted when they saw a gentleman coming in, just somebody different to talk to, and they had a different kind of rapport, but were equally happy to be looked after by a man.*

Bad press

There was clear consensus in the academic staff focus groups that the national media portrayed the NHS as poorly funded and in perennial crisis. They felt that this would have a negative effect on recruitment generally, but may particularly deter men considering leaving other struggling industries. From their own perceptions however the staff groups did not find this 'bad press' to be a valid representation.

L8: And there's a lot of good things happen even during bad times. I've been doing my data collection for my doctorate just now in acute care of the elderly during the winter crisis, and they still fitted in being able to help me get patients, and they still wanted to spend time talking to me about doing things the best way they could for their patients. And I was apologetic all the time about "god, you've got so much going on", and they're like "yeah, but this is just our normal, and actually, today's better than yesterday. And actually, it's not that bad. And we're getting there." There as a camaraderie and there is a positivity in the NHS as well, it's not all terrible all the time.

Gendering of intimate care

It was a strongly held and consistently expressed view in the academic staff focus groups that the more physically intimate the care delivery the more difficult this would be for men.

I: So what this comes onto, what puts people off? What do you think puts men off?

L6: I think you're really onto something there about personal care and the intimacy of that. If you think about the example of midwifery, I'd say even fewer midwives are men. And that's a very intimate job at lots of times, isn't it? So I think that, to me, is a real key reason. But it's the stigma too. You've heard the term "murse", for a male nurse.

In discussion it emerged that this derived from pervasive societal expectations that nursing was a female role. As in the student nurse data, the term 'female nurse' was seen to be superfluous but participants still in practice were accustomed to the use of the term 'male nurse.' This is because there is still a societal expectation and assumption that nurses are female. It was therefore acceptable for female nurses to undertake intimate physical care with male patients but not for male nurses to do so with female patients. It is almost as if female nurses have the societal protection of a professional role. In contrast male doctors gain from this professional protection in a way which is not automatically conferred on men in nursing.

L5: That was the other thing, catheterisation, for example, could have been done by a doctor of either sex. But when nursing...

[TALKING OVER EACH OTHER]

L3: ...or male midwife, even I was like "what?"

L4: *Or a male gynaecologist.*

I: *But you wouldn't think twice about...*

L3: *No, no.*

L4: *Which tells you it's something about the profession itself, rather than the...*

Interestingly as in the student nurse focus group there was consensus that these rules do not apply to mental health nursing which does not seem to jar so much with the male stereotype and therefore is an acceptable career choice for men interested in nursing.

It was felt that this disconnect between perceptions of masculinity and the gendered stereotype of nursing and specifically the word 'nurse' does impact on recruitment from schools. Nursing is not seen as work for men not only because of the intimate physical care involved but also because of perceived role of the man as the 'bread winner' and the person who should earn a wage to support a family. The view was even expressed that there is an assumption in society that 'smart' intelligent people should seek careers other than nursing. It was also suggested that this societal image of nursing as a female occupation can also be reflected in university recruitment materials which in turn serves to perpetuate and reinforce the gender imbalance.

Natural progression, desensitisation

Akin to the theme of 'experience recommendation and role model' emergent in the student nurse data it was seen as easier for men to enter nursing after previous relevant experience. Moreover even if it was said casually, it is significant perhaps that the concept of 'desensitisation' through 'exposure' is applied to the process of men accepting that nursing is work that they can do. This term is more normally used for the process of coming to terms with phobic anxiety. Some men progress naturally into nursing because the profession is already 'in their family' or some have previously been employed as health care assistants. Self-awareness and the ability to deal with issues of particular difficulty for men, such as the physical intimacy of personal care may become easier with increased life experience and maturity. Conversely the experiences of being a nurse may also enhance maturity and confidence in meeting the demands of the role.

L4: *Another thing, actually, now I'm thinking about it, is thinking of the male students who are currently across the three child cohorts, how many of them have links, familial links, to medicine and nursing already. So I don't know whether it's the exposure to that that makes them more interested in doing nursing, or it makes them better at the application process and makes them more attractive to us because they know the things to say and they have some insight.*

Right age, maturity

Being of the 'right age and maturity' was seen as important for any recruit to nursing, but it was seen to be particularly significant for men, who not only may take longer to mature, but also had to find ways of coping with a degree of stigma.

L14: *And if you compare that to girls in fifth or sixth year at school compared to boys in fifth and sixth year at school, they do take that wee bit longer to mature anyway. Which is why girls are all studious and sitting with their heads down. So actually it shouldn't be a surprise, should it?*

The rigours of nurse education were also seen as having an accelerating effect on maturity, causing recruits to 'grow up' quickly.

L20: *I was eighteen and a half, and I had to grow up very, very quickly. And one of the things, the intimacy angle, obviously I knew nurses did that, but it's one thing to know that they do it and another to actually put yourself in the position where you had to. And so that's a thing you kind of have to get past yourself, a wee bit. But also I think I grew up very quickly. And my mum would, if she was here, say that I went from being a typical teenager to a much more confident young man in quite a quick time.*

Bursary

The removal of bursary payments for pre-registration nursing students was, however, seen as a threat to the recruitment of nurses generally but perhaps men in particular.

L11: *I think it's a bloody hard job for everybody, and that requires a lot of commitment, as you say. And they haven't got the options. I think it's a really tough course, it's so specified that you've got the contact hours, and I don't think I could have done it now, because I don't understand how the students live on the bursary and have children, and especially if we're going back to the stereotypical man being the breadwinner, if a bloke loses his job and decides "right, I'm going to try nursing", for three years he's got to support his family, maybe his wife's part time looking after the kids, I know that's really stereotypical...*

Top heavy men

There was a theme in discussion that traditionally men have been over represented at senior management levels in nursing compared to their number in the profession overall. Again as in the student nurse data and the theme 'pushed and pulled up the ladder' academic staff felt that men were more likely to seek and be successful in promotion.

L3: *I know. That's something I was quite accused of, "oh, you're a bloke, you'll be an F Grade, you'll be a Band 8 within two weeks." I was like "calm down." I don't know where that comes from because the people who interview us for these jobs are predominantly females. I don't know where that comes from.*

It was felt by some however that this no longer applies to the same extent with several examples being given from local practice and academic areas.

Guidance Teacher and Career Advisor Questionnaire Results (Phase five)

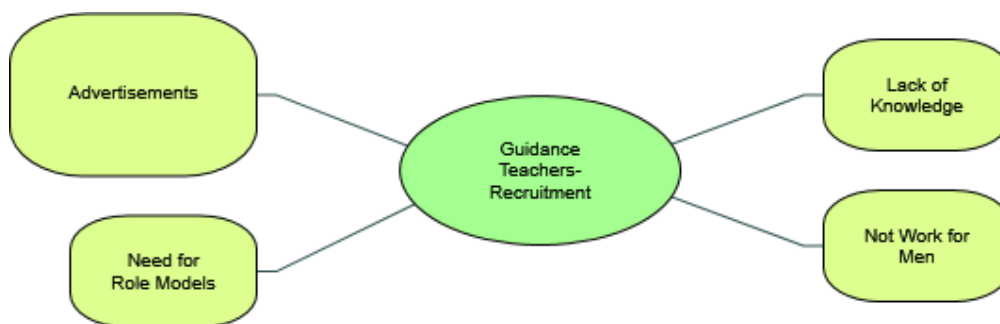


Figure 4. Summary of guidance teacher and career advisor results

The themes from the survey of secondary school career advisors and guidance teachers are shown in Figure 4.

Not work for men

As emerged from the lecturer and student focus groups the perspective that nursing is seen in society as a career for women and not for men was conveyed strongly and consistently from the survey of teachers.

T16: There is no doubt there is still an inherent/ subliminal perception that it is a female profession.

Lack of knowledge

Nevertheless, in this study, the teachers themselves saw nursing as a worthwhile and secure career which men should consider. They felt that lack of knowledge of the actual role of the nurse rather than the perceived image was a barrier to male school pupils in taking this opportunity

Increased information into school about career routes, information about the varied roles in nursing and information to change social stereotypes was felt to be needed.

Need for role models

They felt that the stigma which prevents men considering nursing as a career could potentially be challenged by targeted education and the use of appropriate role models. A consistently expressed need was for male nurses to speak to school pupils directly to erode stigma by demonstrating that masculinity and nursing are not mutually incompatible.

T7: There's need to be more of a breakdown of the stereotypes and I think more communication between schools and male nurses or nursing students might help so that boys can actually see it as an option. When teachers talk about it as an option it doesn't necessarily mean that boys are taking it in because they can't see any role models in that area.

Advertisements

The lack of male images in advertising materials was bemoaned by teachers who felt that this would also help to realign social expectations.

T21: Advertise it as more male friendly and target male applicants specifically as STEM (Science, Technology, Engineering Mathematics) have done in order to attract female

Consensus Building Event (Phase six)

At the Consensus Building Event the results of each of phase of data collection were presented. Following this, participants were asked in groups to develop recommendations and actions for addressing the issues raised. Participants then 'voted' (by placing sticky dots on the group flipcharts round the room) on which of the potential recommendations they thought would be the most promising. The recommendations have been amalgamated and summarised below in order of perceived importance.

- Marketing/'branding' of nursing at a national level
 - Take gender out of marketing of nursing - emphasis skills and qualities of a nurse
 - Promote transferability of skills
 - Promote financial stability, and range of career opportunities in nursing
 - Use social media
 - 'Day in the life' stories
- Careers advisors/guidance teachers in secondary school
 - Provide gender-neutral information
 - Educate about reality of the role of the nurse
 - Promote nursing as an aspirational career with a range of options
- Primary school education
 - Introduce health/health care as a subject early
 - Use gender-neutral images
- Co-ordinated campaign by Colleges, Universities, and NHS emphasising the different routes into nursing
- High profile male nurses needed as role models
- Provide potential applicants opportunities to experience reality of nursing before applying such as taster sessions
- Provide unconscious bias training to NHS and higher/further education staff

These preliminary recommendations are revisited later in this report.

Discussion

The study set out to explore the influences and causes of underrepresentation of men in pre-registration nursing in Scotland.

Rates of recruitment and retention

The first objective was to establish the rates of recruitment and retention of males to pre-registration programmes of nursing education in Scotland (including all fields of nursing and pre-registration MSc options) in Scotland over the past 5 years. We were unable to access data from every university in Scotland, nor data about field/MSc rates. However data from NES about rates in selected institutions and Scotland-wide data was provided. This confirmed that male students account for less than 10% of students on pre-registration programmes in Scotland. Across Scotland this proportion has remained constant over the past 10 years.

There is some regional variation to this and also variation between institutions, and between programmes offered (such as level of degree (BSc, Honours, MSc). There may also be variation between fields of nursing, however this data was not available. The reasons for these variations are unclear and were beyond the scope of this project. Further work is needed to explore the differences in gender balance between different geographical areas, between different fields of nursing and between the different academic award options.

A surprising finding was that male students have lower completion rates. This is concerning, but the reasons are not clear. McLaughlin et al (2010) reported a similar finding in Northern Ireland and while they made a link with gender perceptions (non-completers had less gendered views of nursing) their study did not explore the other factors that may affect non-completion. Data protection requirements meant we were unable to contact male students who had left the programme to ask about their experiences on programme and in practice. Further research is needed to understand more about the reasons for leaving and the additional support that might be appropriate.

Influences on recruitment rates

The second objective was to explore the influences on recruitment rates of males to pre-registration nursing education in Scotland by seeking the views and experiences of male pre-registration nursing students, university and further education college nursing lecturers and school guidance teachers and career advisors. The findings of the focus groups (students and academic staff) and the questionnaire to teachers will be discussed together under the main themes and will be compared to the findings of the systematic literature review. As the literature review was still ongoing when the qualitative data was collected, the findings of the literature review did not explicitly inform the questions asked in phases three, four and five, however the findings are broadly similar.

Work men shouldn't be doing

All the data from students, staff and teachers confirmed the general view in society is that nursing is not a job that men should be doing. This pervasive and powerful negative societal influence was also noted in the literature affecting both school leavers and mature male students (Bartfay et al., 2010, Harding et al., 2017, Meadus and Twomey, 2011, Smith, 2006,

Wilson, 2005). The view that nursing is a 'female job' and is not suitable work for men influenced both the decision to take up nursing and also the choice of field.

Worthwhile career

In spite of this, participants agreed that nursing was an attractive career choice because of the chance to work in a caring profession. Similarly others have noted this as an important factor in men's decision to study nursing (Harding et al., 2017, Ieradi et al., 2010, McKenna et al., 2016, Meadus and Twomey, 2011, Stott, 2006, Tillman, 2006). In this study nursing was also perceived as a worthwhile career because of its comparative stability, security and breadth of opportunity. Financial security and opportunities in terms of career progression and mobility were also attractions of a career in nursing noted in other studies (Christensen et al., 2014, DeVito, 2015, Ellis, 2006, Harding et al., 2017, Ieradi et al., 2010, McKenna et al., 2016, Meadus and Twomey, 2011, Tillman, 2006, Wilson, 2005). These aspects were of particular importance to men who were experiencing difficulties in seeking employment (Christensen et al., 2014, McKenna et al., 2016) or dissatisfied with their current roles (Harding et al., 2017).

Academic staff also felt that there was a need to emphasise the skills and attributes of a nurse and that recruitment should move away from gender-based images. Variety and flexibility were also seen as particularly attractive aspects of nursing. The guidance teachers corroborated the view that it was a worthwhile career choice but highlighted that lack of knowledge about the role and variety of careers was a hindrance in providing advice in schools.

Experience, recommendation, role model

A strong and consistent finding in both student and staff data was the importance of previous experiences or knowledge from other people. This might be relevant experience of being cared for or caring for others or being positively influenced by a significant role model. Having prior exposure to nursing or caring helps male applicants to deal with the challenges of providing intimate care. The literature also suggests that men might have come into contact with male nurses either as a recipient of care or as the family member of a care recipient (Ellis, 2006, McKenna et al., 2016, Wilson, 2014) or through previous employment (e.g. in the military; Ellis, 2006, Harding et al., 2017, Tillman, 2006). Similarly, knowledge from a family member could be important. This accords with evidence from other studies which suggests that many men who come into nursing have a family member or acquaintance who worked as a nurse (DeVito, 2015, Harding et al., 2017, Meadus and Twomey, 2011, O'Lynn, 2004, Tillman, 2006, Wilson, 2005).

The need for positive role models, such as in advertising or at career events was noted by teachers who suggested improved visibility of male nursing examples could be helpful. Students also observed that men were generally absent from recruitment material. However, they were cautious about portraying a (currently) completely unrealistic image of nursing by only having male images or male-only events. Although there is no empirical research evidence, school visits by male nurses to talk to students have been recommended (Wilson, 2005), as is the involvement of men at career open days and recruitment campaigns directed specifically at men (DeVito, 2015). Wilson (2005) suggests that pre-registration nursing courses should be marketed in an androgynous manner and Meadus

and Twomey (2011) recommend careers fairs that do not specifically focus on female students. The male students in the focus groups felt that their presence on the programme was challenging stereotypes and they were keen to be change agents.

Financial aspects

Although long-term career stability was seen as attractive, there was also discussion about the perceived low earning potential of nursing being a disincentive to choosing nursing as a career. Staff agreed that especially for men who might be changing career, this could be challenging as they are seen as the 'bread winner'. Financial issues have previously been identified as being particularly problematic for male nursing students (Wilson, 2005). The importance of the bursary while on the programme was also highlighted in the focus groups, and concerns were expressed about the potential loss of this support.

An additional deterrent to recruitment noted by academic staff was negative publicity in the media about the NHS, such as funding challenges or other crises. They felt this might put off potential male applicants.

Maturity/right age

Both staff and students noted that older male applicants may be more resilient and able to cope with the potential stigma of being a male student in a predominantly female environment. This may account for some male applicants choosing nursing in later life when more mature. In earlier studies many of the men came from previous careers and were not school leavers (Wilson, 2005). Indeed, men felt there was a lack of male school leavers on the course and this was reflective of failures of school counsellors to suggest nursing, negative peer pressure and a biased advice in favour of male dominated professions (Meadus and Twomey, 2011, Smith, 2006, Wilson, 2005).

Factors affecting retention

Although not investigated explicitly, some of the themes that emerged relate to 'on programme' issues that potentially affect retention.

Pushed and pulled up the ladder

Students reported an expectation among clinical staff that they (as male nurses) would be more likely to be ambitious and be promoted. Staff also felt that male students were more likely to seek and be successful in seeking promotion. Data supplied by ISD (personal communication) confirms that compared to the 10.4% of male nursing staff at Band 5, the proportion of males increases to 18.5% at Band 8 (all band 8, A-D).

The attraction of an academically challenging programme was mentioned by the pre-registration MSc students. This has been noted by others (Harding et al., 2017).

Gender differences

In clinical practice, students noted the positive effects of having a male presence in the workforce included improved communication, and improved group dynamics. Academic staff also agreed that having greater gender balance would improve the workforce dynamic as well as the quality of patient care. These positive views are in contrast to reports in the

literature of the difficulty and feelings of isolation of being a male in an all-female environment (Meadus and Twomey, 2011, O'Lynn, 2004, Wilson, 2005, Stott, 2006). Other studies have found that male students feel they are perceived negatively in placement (Bartfay and Bartfay, 2007, Meadus and Twomey, 2011, O'Lynn, 2004, Stott, 2006, Wilson, 2005) or the course material was gender biased (Bell-Scriber, 2008, O'Lynn, 2004, Kermode, 2005).

Male nurse

It further emerged that the relative novelty of having a male member of staff led to an anomalous situation where the term 'male nurse' was often used as an introduction. In contrast the term 'female nurse' was never needed. The assumption of femininity associated with the profession of nursing led to some challenges for the male students in terms of their masculine identity. Gendered constructions of nursing have been previously noted and found to affect career choice (Muldoon and Reilly 2003) and completion rates (McLaughlin et al 2010).

Intimate care

The difficulty for male nurses of providing intimate care to female patients was noted by both students and academic staff. In previous studies two areas of practice placement consistently raise issues for male students: paediatric placements (Meadus and Twomey, 2011) and obstetrics and gynaecology. The latter area is associated with a higher rate of treatment refusal (Anderson, 2004, Christensen and Knight, 2014, Ellis, 2006, O'Lynn, 2004, Smith, 2006, Stott, 2006, Wilson, 2005) or feeling anxious that female patients could feel uncomfortable or make accusations about inappropriateness when providing intimate care (Meadus and Twomey, 2011, O'Lynn, 2004). The need to ask permission from female patients for a male nurse to provide intimate care is in contrast to the situation for male doctors. For them, it seems their professional identity predominates over their gender such that female patients do not tend to object, or indeed be asked, about being cared for by doctors who are men.

Although negative experiences were noted, participants in this study felt some fields of nursing or specialties (such as mental health nursing or A&E) were more attractive to male nurses. Others have also found that men prefer working in more technical or specialised areas of nursing (DeVito, 2015, Ellis, 2006, McLaughlin et al., 2010, Stott, 2006), therefore placements in such areas may improve the experiences of male students (DeVito, 2015).

However other studies have also reported male students having positive experiences on placement (Wilson, 2005, Smith 2006).

Attrition rates

Similar to McLaughlin et al. (2010), the data from NES confirms that attrition of male students is higher than female students. Previous literature suggests some possible explanations: negative staff attitudes (Bell-Scriber, 2008, O'Lynn, 2004), gender biased course material and language (Anderson, 2004, Bell-Scriber, 2008, Christensen and Knight, 2014, DeVito, 2015, Ellis, 2006, Ieradi et al., 2010, O'Lynn, 2004, Smith, 2006), course assignments requiring reflective writing (Christensen and Knight, 2014), lack of male academic role models (DeVito, 2015, Ellis, 2006, O'Lynn, 2004, Stott, 2006, Smith, 2006),

lack of other male students on the course (Anderson, 2004, DeVito, 2015, O'Lynn, 2004), undue pressure in the classroom due to 'standing out (Anderson, 2004, Christensen and Knight 2014, DeVito, 2015, Ellis, 2006, Meadus and Twomey, 2011), additional financial pressures (particularly for older students) (Ellis, 2006, Smith, 2005, Wilson, 2005) and unsupportive friends or homophobic/gender biased remarks (Bell-Scriber, 2008, DeVito, 2015, O'Lynn, 2004, Wilson, 2005).

Further work is needed to understand the experiences of male students on placement and in the classroom, and strategies that might reduce male attrition. Strategies that have been suggested include: support and positive feedback for male students (Meadus and Twomey, 2011, Ieradi et al., 2010, Wilson, 2005) and equal treatment by academic staff (Anderson, 2004). Other factors that can help male students are having other male students in the class (Anderson, 2004, Meadus and Twomey, 2011), positive relationships with female students (Anderson, 2004, Bell-Scriber, 2008, DeVito, 2015, Ellis, 2006) and male student support groups (Stott, 2006, Wilson, 2005).

Strengths and limitations

The systematic review of the literature identified studies from the USA, Canada, Australia and New Zealand, however only one study (two papers) was from the UK (Northern Ireland). Thus findings of the review may not be fully applicable to the UK, however results were broadly similar to the qualitative findings. A strength of this study was the geographical spread of data collected from students and academic staff from across Scotland (Edinburgh, Dundee, Aberdeen and West of Scotland). The majority of academic staff came from the university sector with college staff being under-represented. Similarly respondents to the questionnaire to teachers came from all areas of Scotland, however there were fewer respondents from the Edinburgh and Glasgow areas. We were unable to contact male students who had left the programme so the reasons for non-completion of programme could not be explored. The final recommendations have been informed by a combination of the study findings, the literature and consensus from a broad range of stakeholders from across Scotland.

Conclusions

This work has highlighted a number of aspects that influence the underrepresentation of men in pre-registration nursing programmes in Scotland. The literature review corroborated all the themes identified, albeit only one study was carried out in the UK. The data confirm that the rate of men in pre-registration nursing programmes in Scotland is below 10%, with some slight geographical and programme variation. A surprising finding was that male students are less likely to complete the programme than females. This needs further investigation.

Although nursing is viewed as a worthwhile career, the pervasive societal view that nursing is a female profession was a powerful deterrent to males considering nursing as a career. Having positive experiences of care/caring or being influenced by a family member or a role model were important drivers to overcoming this negativity. Similarly, being more mature was helpful in order to cope with the predominantly female environment or the negative stereotypes. Concerns about financial challenges while on programme, or earning potential once qualified were also problematic, particularly for mature male students.

In the clinical environment, while the benefits of a gender mix in the workforce was acknowledged, male students felt differently labelled as a 'male nurse' with inherent challenges in terms of masculinity and the provision of intimate care. More 'technical' specialities (such as A&E) or certain fields (such as mental health) with a higher proportion of male staff were more attractive to men and as a consequence easier to work in.

Recommendations

The final objective was to develop strategies to address the issues identified. Using the recommendations prioritised at the consensus building event and informed by the literature and our data collection (the focus groups with male students, focus groups with academic staff and the questionnaire to teachers), the following recommendations are proposed:

1. A positive rebranding of nursing at a national level is needed. This should be gender-neutral and promote the skills and qualities of a nurse, the academic nature of the programme, the transferability of skills, the financial stability of the profession, the range of career opportunities and the opportunities for career mobility. Social media and 'day in the life' stories could be used effectively.
2. Education should begin in primary schools with the early introduction of health and health care topics using gender-neutral images and language.
3. Acknowledging the potential influence of careers advisors and guidance teachers in secondary schools, greater efforts should be made to provide schools with gender-neutral information, educate about reality of the role of the nurse and promote nursing as an aspirational career with a range of options.
4. A co-ordinated campaign by colleges, universities, and the NHS is needed to emphasise the different routes into nursing.
5. High profile examples of men in nursing are needed as role models and to provide outreach examples in school and at careers events. The narratives of nurses who are men could be easily commissioned and used as positive examples of men in nursing.
6. Potential applicants should be provided with opportunities to experience the reality of nursing before applying, such as taster sessions.
7. Unconscious bias training should be provided to NHS, college and university staff about the importance of using gender-neutral language and images and avoiding the use of the term 'male nurse'.

Although attrition of male students from nursing programmes has been highlighted as an issue, further work is needed to understand the reasons for this before recommendations can be made.

Future research

This study highlighted a number of areas where further work is needed:

1. There is an urgent need to understand the reasons for the increased attrition among male students of nursing in Scotland. What are the reasons men leave nursing programmes and what kind of support might help to improve retention and completion rates?
2. Further work is needed to understand the reality of nursing for men in Scotland. What are the challenges and rewards of working in a female dominated profession and what are the reasons for a higher proportion of men working at more senior grades?
3. There is need to improve understanding of intersectionality. Further exploration of data relating to gender, age, field of nursing (adult, mental health, child nursing, midwifery), level of award (ordinary degree, honours, masters), clinical environment (care homes, A&E, ICU, etc) and geographical area is needed.
4. There is a need to explore the impact that having a more gender balanced nursing workforce might have. What are the views of patients and staff about the impact of men in the nursing workforce and in the different clinical environments?

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Appendix 1: Search Strategies

Medline

Searched using Ovid MEDLINE(R) ALL on 14/12/17.

- 1 exp *men/ or nurses, male/
- 2 (nurses/ or nursing staff/) and (male/ or men/)
- 3 Midwifery/ and (male/ or men/)
- 4 Students, Nursing/ and (male/ or man/)
- 5 community health nursing/ and (male/ or man/)
- 6 psychiatric nursing/ and (male/ or man/)
- 7 pediatric nursing/ and (male/ or man/)
- 8 learn* disabilit* nurs*.mp. and (male/ or man/) [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
- 9 ((male or man or men) adj3 nurs*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
- 10 ((male or man or men) adj3 midwif*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
- 111 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10
- 12barrier.ab,ti.
- 13facilitator.ab,ti.
- 14experience.ab,ti.
- 15view.ab,ti.
- 16Attitude/ or "Attitude of Health Personnel"/
- 1712 or 13 or 14 or 15 or 16
- 1811 and 17
- 19Focus Groups/mt [Methods]
- 20Interview/
- 21Qualitative Research/
- 22Self Report/
- 2319 or 20 or 21 or 22

2418 and 23

25men in nursing.ab,ti.

26males in nursing.ab,ti.

2724 or 25 or 26

28limit 27 to english language

CINAHL

Searched using EBSCO on 14/12/17

S32	S28 OR S29 OR S30
S31	S28 OR S29 OR S30
S30	males in nursing
S29	men in nursing
S28	S13 AND S22 AND S23
S27	S13 AND S22 AND S23
S26	S13 AND S22 AND S23
S25	S13 AND S22 AND S23
S24	S13 AND S22 AND S23
S23	S14 OR S15 OR S16 OR S17
S22	S18 OR S19 OR S20 OR S21
S21	(MH "Structured Questionnaires") OR (MH "Open-Ended Questionnaires") OR (MH "Scales") OR (MH "Questionnaires")
S20	(MH "Semi-Structured Interview") OR (MH "Structured Interview") OR (MH "Unstructured Interview") OR (MH "Interviews")
S19	(MH "Focus Groups")
S18	(MH "Qualitative Studies") OR (MH "Multimethod Studies")
S17	(MH "Attitude of Health Personnel") OR (MH "Student Attitudes") OR (MH "Faculty Attitudes") OR (MH "Job Experience") OR (MH "Student Experiences")
S16	AB experience or AB difficult* or AB challeng*
S15	AB facilitator
S14	AB barrier

S13 S1 OR S2 OR S12

S12 S10 AND S11

S11 S3 OR S4

S10 S5 OR S6 OR S7 OR S8 OR S9

S9 learn* disabilit* nurs*

S8 (MH "Pediatric Nursing")
(MH "Psychiatric Nursing") OR (MH "Military Nursing") OR (MH "Home Nursing, Professional") OR (MH "Hospice and Palliative Nursing") OR (MH "Family Nursing") OR (MH "Correctional Health Nursing") OR (MH "Anesthesia Nursing") OR (MH "Ambulatory Care Nursing") OR (MH "Forensic Nursing")

S7

S6 (MH "Midwives") OR (MH "Nurse Midwives")

S5 MH "Nurses+"

S4 (AB men) or (AB man)

S3 AB Male

S2 MM "Students, Nursing, Male"

S1 MM "Nurses, Male"

PsycInfo

Searched using EBSCO on 15/12/17

S18 S15 OR S16 OR S17

S17 males in nursing

S16 men in nursing

S15 S12 AND S13 AND S14

S14 S8 OR S9 OR S10 OR S11

S13 S3 OR S4 OR S5 OR S6 OR S7

S12 S1 AND S2

S11 AB survey

S10 AB interview

S9 DE "Questionnaires"

S8 DE "Qualitative Research"

S7 DE "Student Attitudes"

S6 DE "Work (Attitudes Toward)" OR DE "Male Attitudes"

S5 AB experience or AB difficult* or AB challeng*
S4 AB facilitator
S3 AB barrier
S2 (AB men) or (AB man) or (AB male)
S1 DE "Psychiatric Nurses" OR DE "Nursing Students" OR DE "Nurses"

Appendix 2: Participant Information Sheet (Students)

Views and experiences of male nursing students about the facilitators and barriers to choosing nursing as a career.

Invitation to participate in a research project

The aim of this project is to investigate and identify barriers to and facilitators of male students' choice of nursing as a degree programme. The project is being carried out for the School of Nursing and Health Sciences by Jacqueline Eccles, lecturer in Mental Health Nursing and overseen by Dr Heather Whitford (SNHS).

Why are we researching this?

Current student numbers indicate a gender split of approximately 92% (female) to 8% (male) at the School of Nursing and Health Sciences, University of Dundee. This is far short of the figures the University and the Scottish Government would like to see.

What to expect if you take part

Why do we want to talk to you?

We are interested in finding out more about what made you choose nursing (be it adult, child or mental health field).

What do you have to do?

We would like to invite you to participate in a focus group where you will be asked to respond to various questions about your application journey to the University of Dundee and your views about nursing as a career. At the focus groups, refreshments will be provided. There will be no financial incentive to take part. Approximately six to ten students will take part in each focus group.

Time commitment

It is anticipated that focus group session should last approximately 2 hours. If you are on placement at this time, we will authorise time off for you to attend and this will not affect your attendance record. If you are in theory time, groups will be organised so as not to interfere with the teaching timetable. Groups will be held during the day.

Other important information about your data

The session will be recorded. The recording will be destroyed after three years along with the transcriptions. All transcriptions will be anonymised. Recordings and transcriptions will be stored on a university drive with secure access only (by username and password). No identifying information will be collected or kept about you.

Risks

There are no known risks associated with participating in this study.

Participation and termination of participation

Taking part in the focus group is voluntary. Participation (or not) will have no effect on your grades, course work or progression through the programme. You are free to withdraw at any time without giving a reason.

Ethical considerations

The School of Nursing and Health Sciences Research Ethics Committee of the University of Dundee has reviewed and approved this research study.

Researcher Contact Details

Local contact details included.

Appendix 3: Focus group topic guide (Students)

Views and experiences of male nursing students about the facilitators and barriers to choosing nursing as a career.

Potential questions for focus group:

What attracted you to nursing as a career?

What do you think of the (female) gender stereotyping associated with nursing?

What, if any effect did it have on you?

Did it put you off nursing? If so, how? If not, why not?

What helped you decide to apply for nursing? What made this process easier?

Tell us about anything that hindered your decision to apply for nursing?

How could we make applying for nursing at the University of Dundee more attractive to male applicants?

Would you have liked to have been interviewed with other male candidates? Why (not)?

What do you think about the images of nursing used by the university on the website and publicity material? (I can have this set up for them to look at on the day)

Is there anyone in particular who has influenced your decision to pursue nursing (e.g. a family member or respected friend)?

Thinking about recruiting male students to nursing, is there anything else you'd like to say or tell us?

Supplementary questions if time allows:

How old were you when you decided you wanted to be a nurse?

Can you tell us what comes to mind when you think of 'a nurse'?

Appendix 4: Consent form (Students)

Views and experiences of male nursing students about the facilitators and barriers to choosing nursing as a career.

Please tick the boxes to confirm you have read and understood each statement.

1. I confirm that I have read and understood the information sheet for the above study.
2. I have had the time and opportunity to ask any questions that I may have regarding the project.
3. I understand that my taking part is voluntary and that I can withdraw from the study at any time or decline to answer particular question(s) without giving a reason.

4. I understand that whether I participate or not will have no effect on my career progression or academic life at the university.
5. I understand that all data will be held anonymously and securely on a university secured drive, accessible only by username and password, in accordance with the Data Protection Act 1998 and as required by the University. I understand that focus groups will be recorded and those recordings (and transcriptions thereof) will be stored securely in the manner described above and destroyed after three years.
6. I understand that other researchers will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form.
7. I understand that my words may be quoted in publications and reports in relation to this project, without identifying me.
8. I understand that I will not be identifiable in any of the data that is held by or published from this project.
9. I understand that other genuine researchers may use my words in publications, reports, web pages, and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form

I agree to take part in this project:

Name of participant [printed]

Signature

Date

Researcher Contact Details:

Local contact details included

Appendix 5: Participant Information Sheet (Lecturers)

Views and experiences of University and College nursing lecturers about the influences and causes of underrepresentation of men in pre-registration nursing in Scotland.

Invitation to participate in a research project

The aim of this project is to explore the influences and causes of underrepresentation of men in pre-registration nursing in Scotland. The project is being carried out by the School of Nursing and Health Sciences at the University of Dundee.

Why are we researching this?

Current student numbers indicate a gender split of approximately 92% (female) to 8% (male) in Scotland. The Gender Action Plan has set a target that no subject should have an extreme gender imbalance of more than 75/25 by 2030 (Scottish Funding Council 2016). The Martin Commission on Widening Access to Nursing and Midwifery education has highlighted this as a priority area.

What to expect if you take part

We would like to find out the views of nursing lecturing staff about the factors that affect low recruitment of men in nursing and suggestions for addressing the issues.

We would like to invite you to participate in a focus group of further education College and University staff where you will be asked to discuss the influences on recruitment rates of males into pre-registration nursing in Scotland. The focus groups will be held on University premises and refreshments will be provided. There will be no financial incentive to take part. Approximately eight to ten lecturers will take part in the focus group and it is anticipated that focus group session will last about 2 hours.

The session will be recorded. The recording will be destroyed after three years along with the transcriptions. All transcriptions will be anonymised. Recordings and transcriptions will be stored on a university drive with secure access only (by username and password). No identifying information will be collected or kept about you.

There are no known risks associated with participating in this study. Taking part in the focus group is voluntary. Participation (or not) will have no effect on your employment. You are free to withdraw at any time without giving a reason.

Ethical considerations

The School of Nursing and Health Sciences Research Ethics Committee of the University of Dundee has reviewed and approved this research study.

Researcher Contact details:

Local contact details included

Appendix 6: Focus group topic guide (Lecturers)

Potential questions for the focus group:

What do you think attracts men to nursing as a career?

What puts them off applying to nursing? /What are the barriers to men applying to study nursing?

How could we make applying for nursing more attractive to male applicants?

What do you think about the images of nursing used by the university/college/in the media?

Thinking about recruiting male students to nursing, is there anything else you'd like to say or tell us?

What particular challenges do male nursing students (compared to female nursing students) face while at College/University? In the classroom? In theory?

What strategies might help to support male nursing students while at College/University?

While in placement?

What do you think of the (female) gender stereotyping associated with nursing? Do you think this puts men off nursing?

Appendix 7: Consent form (Lecturers)

Views and experiences of University and College nursing lecturers about the influences and causes of underrepresentation of men in pre-registration nursing in Scotland.

Please tick the boxes to confirm you have read and understood each statement.

1. I confirm that I have read and understood the information sheet for the above study
2. I have had the time and opportunity to ask any questions regarding the project.
3. I understand that my taking part is voluntary and that I can withdraw from the study at any time or decline to answer particular question(s) without giving a reason.
4. I understand that whether I participate or not will have no effect on my employment.
5. I understand that all data will be held anonymously and securely on a university secured drive, accessible only by username and password, in accordance with the Data Protection Act 1998 and as required by the University. I understand that focus groups will be recorded and those recordings (and transcriptions thereof) will be stored securely in the manner described above and destroyed after three years.
6. I understand that other researchers will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form.
7. I understand that my words may be quoted in publications and reports in relation to this project, without identifying me.
8. I understand that I will not be identifiable in any of the data that is held by or published from this project.
9. I understand that other genuine researchers may use my words in publications, reports, web pages, and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form.

I agree to take part in this project:

_____ Name of participant [printed]	_____ Signature	_____ Date
_____ Name of researcher [printed]	_____ Signature	_____ Date

Researcher Contact details:

Local contact details included

Appendix 8: Questionnaire for secondary school guidance teachers and careers advisors

School of Nursing and Health Sciences

Attitudes of secondary school teachers in Scotland who have a role in guidance or careers advice towards nursing as a career for men

We are carrying out a study funded by NHS Education for Scotland into the underrepresentation of men in pre-registration nursing in Scotland. As part of this we are interested in the views of secondary school teachers in Scotland who have a role in guidance or careers advice. We would be grateful if you could complete this short questionnaire.

The study has been approved the Nursing and Health Sciences Research Ethics Committee (approval ref) at the University of Dundee. Your response will be anonymised. Return of the questionnaire will be taken as consent to participate in the study.

1. Only about 10% of nurses, and nursing students are male. Are you surprised at that? Why or why not?

2. From your experience with high school students, what do you think is the reason for the low numbers of male students applying to nursing?

3. What do you think might be able to be done to increase the proportion of men applying to nursing?

4. Anything else you want to say?

Some demographic questions:

5. Which area of Scotland do you work in?

Aberdeen City	<input type="checkbox"/>
Aberdeenshire	<input type="checkbox"/>
Angus	<input type="checkbox"/>
Argyll and Bute	<input type="checkbox"/>
Clackmannanshire	<input type="checkbox"/>
Dumfries and Galloway	<input type="checkbox"/>

- Dundee City
- East Ayrshire
- East Dunbartonshire
- East Lothian
- East Renfrewshire
- City of Edinburgh
- Falkirk
- Fife
- Glasgow City
- Highland
- Inverclyde
- Midlothian
- Moray
- North Ayrshire
- North Lanarkshire
- Perth and Kinross
- Renfrewshire
- Scottish Borders
- South Ayrshire
- South Lanarkshire
- Stirling
- West Dunbartonshire
- West Lothian

6. What is your role in the school?

7. What is your gender?

- Male
- Female
- Prefer not to say

Thank you for completing this questionnaire

Appendix 9: Summary of characteristics of included studies

Author	Year	Aim	Setting	Study Design	Participants
Anderson	2014	To explore the learning environment between faculty and male undergraduate nursing students	USA	Qualitative - observations, interviews and document analysis	Male (n=2) and female (n=34) nursing students. Faculty members (n=3). Age range: 22-52.
Bartfay	2007	To examine current attitudes and perspectives regarding men enrolled in nursing as described	Canada	Cross-sectional study using the PAMINE (Perceived Acceptance of Men in Nursing Education) survey	Male nursing students (n=14). Mean age = 26 Female nursing students (n=173). Mean age = 23
Bartfay	2010	To examine societal perceptions and attitudes to men nursing reported by male and female nursing and non-nursing students	Canada	Cross-sectional survey	Male nursing students (n=12). Mean age = 28.9 Female nursing students (n=70). Mean age = 21.8 Non-nursing male students (n=36). Mean age = 23.9 Non-nursing female students (n=31). Mean age = 21.6
Bell-Scriber	2008	To examine differences between male and female nursing students perceptions of education	USA	Qualitative – semi structured interviews	Male traditional age college students (aged 20-22; n=4) Female traditional age college students (aged 20-22; n=4)
Christensen	2014	To examine the experience of men “training” to be registered nurses	New Zealand	Qualitative – semi-	Male nursing students (n=5). Mean age = 25

Author	Year	Aim	Setting	Study Design	Participants
				structured interviews	
DeVito	2016	To explore male students' experiences in a nursing programme	USA	Qualitative – written accounts	Undergraduate male nursing students (n=23)
Ellis	2006	To explore male students' experiences in a nursing programme	USA	Qualitative – interviews	Male nursing students (n=13). Age range described as early 20s to late 30s.
Harding	2017	To examine male student's reasons for undertaking a nursing degree	New Zealand	Qualitative – semi structured interviews	Male nursing students on a graduate programme (n=8). Age range 23-39.
Ieradi	2010	To explore male students' experiences in a nursing programme	USA	Qualitative – semi structured interviews	Male students (n=7). Age range 23-47.
Kermode	2006	To explore perceived prevalence of sexism in nursing programmes (compares with non-nursing programmes)	Australia	Cross-sectional survey	Nursing (n=55) and non-nursing students (n=166). NB 33% of the nursing student participants were male.
McKenna	2016	To examine the characteristics of males entering one accelerated graduate entry masters pre-registration nursing program	Australia	Cross-sectional survey	Male and female on the graduate entry Master of Nursing programme (n=145). 30% of respondents were male. Age range was 21-56.
Meadus	2011	To explore male students' experiences in a nursing programme	Canada	Qualitative – focus groups	Male nursing students (n=27). Aged between 20-38.
Muldoon, McLaughlin	2003, 2010	To examine how gendered views of nursing influence student nurses' career progression	Northern Ireland	Cross-sectional questionnaire with follow-	Male nursing students (n=34) Female nursing

Author	Year	Aim	Setting	Study Design	Participants
				up attrition data	students (n=350) Mean age of all students = 20.7
O'Lynn	2004	To identify prevalence and perceived importance of barriers in nursing programmes	USA	Cross-sectional survey	Male members of the American Assembly of Men in Nursing (n=64). Mean age at graduation= 29.8 Current licenced male registered nurses in Montana (n=47). Mean age at graduation was 29.9
Smith	2006	To explore challenges faced by male mature students in a nursing programme	USA	Mixed methods: cross-sectional survey and semi-structured interviews	Mature male students over 25 years (n=29 for questionnaire and n=6 for interviews). Age range 26-60.
Stott	2006	To investigate factors influencing both the academic and clinical practice performance of undergraduate male nursing students	Australia	Qualitative interviews	Male Bachelor of Nursing Students (n=8). Age range 21-53.
Tillman	2006	To describe the meaning of masculinity for recent male baccalaureate nursing program graduates	USA	Qualitative – semi-structured interviews	Recent male nursing graduates (n=8).
Wilson	2014	To explore the experience of males in a nursing school and some strategies at the local university level to encourage recruitment and retention of males in nursing.	Australia.	Qualitative interviews	Male UG nursing students (n=10). Mean age 30.2 (range 21-40).