

Literature Review

What UK career guidance counsellors in high schools and further education think about nursing as a career for men

David Stein ^{1a} , Paul Regan ^b 

^a Senior Lecturer in Pre-Registration Adult Nursing, School of Nursing and Midwifery, University of Central Lancashire; ^b Senior Lecturer in Adult Nursing, School of Nursing and Midwifery, University of Central Lancashire;

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Abstract

Aim: To identify why men in Western societies consistently make up between 9-11% of the nursing workforce and viable solutions to this Global recruitment issue.

Methods: A review of the literature was undertaken using Cinhal Ultimate, Embase and Nursing and Allied Health search engine databases. n=490 studies were retrieved, reduced to n=65 with a final n=21 appraised.

Findings: The identified themes were; promoting nursing in secondary school, and for career counsellors to suggest nursing as a career choice to adolescent boys.

Discussion: Significant others such as family members, and friends influence on adolescent boys had a positive impact on the choice of career, and exposure as a patient or visitor to what nurses do, and outreach work in schools help to support an interest in nursing as a career. Adult partners were found to be instrumental in supporting a change of career later in life. The issue of job security, promotional prospects, and leaning towards more technical roles in nursing were motivational themes when choosing a career path, with friendliness, feeling included, and low pay, considered key factors. Lastly, the specific role of career guidance counsellors (CGC's) was found to be instrumental in widening the choices for a career in nursing, with differences in attitudes and expectations for boys seen in private and public education.

Conclusion: CGC's can play a vital role in informing their male and female students about career opportunities in the caring profession although may need further support from industry experts. In addition, schools and colleges should be following benchmarks for good career guidance.

Introduction

The National Health Service (NHS) is short of nurses, midwives, and General Practitioners with just under 47,000 vacancies in nursing alone in 2022 (NHS Digital,

2022). The healthcare workforce is in decline for many reasons within the United Kingdom (UK), due to an ageing workforce, Government funding, policy and strategy failures and pay disagreement (Hutchings, 2024). According to NHSE/NHSi (2019), the workforce population is 52% between 35 and 54 years of age with over 20% 55 years and above. Brexit reduced the number of overseas applicants due to language testing and university reduction of international places (Hacker, 2021; Dayan et al., 2024). Finally, the removal of the NHS funding bursary, although replaced by a learning fund (NHSBSA, 2024), led to a reduced number of applications to nursing and midwifery by 31% between 2016 and 2018, with a 39% fall in mature students and 40% of men applying to train as a nurse (NHSE & NHSi, 2019, p. 23).

To address the NHS staff shortages, one solution to explore is to increase the number of men applying to the nursing profession. Yet there remain mixed messages from NHS planning, when stating their aim was to "... close the gender pay gap and promote equality for women..." who make up more than 70% of the workforce (NHSE and NHSi, 2019, p. 11).

The NHS Equality, diversity, and inclusion improvement plan (NHSE, 2023) claimed to celebrate diversity and inclusion, but the word "men" is noticeably absent in the plan and instead refers to women six times or gender. Whilst the plan acknowledges a need to support a "... diverse workforce...representative of the communities it serves..." (p. 6), 77% of the 1.3 million workers were reported to be women (NHSE, 2023), and no mention of men in the other 23% of workers.

Strategies to increase the number of men in nursing

According to WHO (2016), the 'Workforce 2030' agenda recommends strategies to improve both performance

¹ **Corresponding author:** School of Nursing and Midwifery, University of Central Lancashire, PR1 2HE, UK.
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and equitable distribution of health workers. For example, to make a nursing career attractive, a package of gender-sensitive recruitment should include job security, a manageable workload, housing, education, development opportunities and a safe working environment free from violence and discrimination. Whilst the discussion from WHO (2016) explored the issues worldwide and for each country to adopt its strategy, there are cultural variations within each country (Mao et al., 2020). For example, there may be regional variations pertinent to population mix, lack of inclusion from ethnic minorities and a need to consider issues of gender, culture, social economic issues, power, and education (Mao et al., 2020; Pool, 2012). Worldwide, statistics identify the gender gap exists in the nursing workforce and understanding why there is a lack of interest from secondary and 6th form college students and the impact of career guidance councillors' promotion of nursing in schools and further education, may help to increase the uptake of men into the nursing profession.

With men in the UK representing just over 10% (NMC, 2017) of nurses, there appears to be no simple answer to encourage more to consider a career in nursing. However, higher education institutions (HEI's) have developed strategies encouraging more men to consider nursing (Clifton et al., 2018). Approaches to promote men apply for nursing include gender-neutral or male-focused recruitment material, male-only scholarships, and various university-focused social media campaigns (Clifton et al., 2020). Some universities are developing strategies, such as Coventry University grants (Coventry University, 2017), Nottingham University male-specific promotional material and Dundee's Twitter campaign- #MenDoCare (University of Dundee, 2017) to target men into education and focus on healthcare.

Nursing workforce and representation – gender

Understanding why men are less likely to enter the nursing profession is important before society and industry can begin to undo the disparities (Chong, 2005). The choice of career is influenced by the student's perceptions of success and by the subjective value identified with alternative career pathways (Eccles, 1987; Eccles, 1994). Perceived competencies and perceived goal fulfilment are explained by Bandura (1977) with the questions, "what can I do" and "what can I get" are reflected in expectations of salary, power, and respect. The social role theory seeks to explain that people deduce the characteristics of the role based on the gender make-up of that profession. For example, most caregiving roles are performed by women and because the role requires communal behaviour, the assumption must be that women are communal i.e. caring, sensitive and have general concern for others (Eagly, 1987; Eagly & Sczesny, 2019; Ramsey, 2017). Conversely, the status content model posits that the higher the status of the group the greater their perceived competence and as such most high-sta-

tus roles are occupied by men implying by association, their greater competence (Fiske & Durante, 2016).

Historical influences

An exploration of the history of nursing is important to understand how since the concept of modern nursing was derived, how despite males being 50% of the UK population, they are in a position of continued under representation in nursing (ONS, 2022). Before the creation of the General Nursing Council, later to become the Nursing and Midwifery Council, any number of men in the profession could, by definition, call themselves a nurse. Men have been recorded in nursing from 250BC in the first recorded nursing school in India and working in workhouses and voluntary hospitals in Victorian England (Mackintosh, 1996). Nursing during the late 19th Century was identified as employment for those with low status, a poor education and nursing influenced by religious sisterhoods with no space for men (Mackintosh, 1996). This transformation was inspired by the Nightingale-trained nurses based on religious education, assumed it was natural for women to take on the nursing role, espousing Victorian values of femininity and further isolating men away from the profession (Helmstadter, 2009).

The *Nurses Registration Act* (1919) offered only women a right to enter the nursing profession, creating the movement and context for society as we know it today – nursing being feminised – and the perception of "a good nurse is a good woman." Nightingale's desired traits in her nurses – empathy, compassion, and gentleness, were perceived to be only achieved by women and not men (Evans, 2001). Post-1920, women were seeking alternative employment opportunities and with hospital numbers increasing, opportunities for men increased until the second world war impacted on the workforce again, as men enrolled en masse into the military.

The reshaping of the General Nursing Council in 1949 saw active attempts to encourage recruitment by fast-tracking ex-military men to join the nursing profession (Mackintosh, 1996). A historical parallel to the shortage of men in nursing was the lack of females in the medical profession. However, as more women in the UK year on year enter the medical profession at 47.5% (GMC, 2021), men entering nursing roles has remained static at 10-11% (Ford, 2019). This figure is similar across other Western societies, for example, America 11.7%; Australia 11.46%; the UK 11.38%; and Canada 9.15% (WHO, 2022). The nursing profession is working hard to challenge stereotypes both in industry, professional registration, the Nursing & Midwifery Council and HEI's to make nursing appealing to men as a profession. Today, as in the late 1940s, we need to increase the workforce in nursing and should again view men as one of the potential solutions.

Table 1: PICO table

Population	Intervention	Comparison	Outcome
Men or male AND student or undergraduate AND nurse or nurses or nursing or student nurse or healthcare professional	Recruitment, strategy, initiatives, awareness, selection or application	Nursing workforce, women, female, gender roles, expectations, strategies	Recruitment of men, understanding the relevant issues, identifying suitable recommendations

Literature review

A PICO table (population, intervention, comparison, and outcome) was completed to identify appropriate search terms (see table 1 entitled: PICO table). Three e-databases (Cinahl Ultimate, Embase, Nursing & Allied Health) were searched using keywords “men or male AND student or undergraduate AND nurse or nurses or nursing or student nurse or healthcare professional AND recruitment, selection, or application.” The retrieved findings (see figure 1 entitled: PRISMA flow diagram) identified n=490 excluding n=425 research studies when limited to full text and English language, reduced further to n=65 due to cultural differences, non-relevance to men or post registration. Most of the studies centred around adult nursing, adult recruitment, retention, or attainment. Research studies for inclusion explored why men chose nursing as a career, experiences of graduate education and post-qualification/registration experience. Inclusion and exclusion criteria (see table 2) filtered dates greater than 2012, writing in English and full text, finally reduced to n=21. However, exceptions were made for two research studies which had no full text available and were accessed either through ResearchGate© (Kelleher & Connelly, 2012), or journal archives (Pool, 2012). These research papers (see table 3 entitled: Table of findings) focused on why men came into or were not interested in nursing as a career and not why they chose a specific field of nursing.

Critical appraisal of the studies

Examining the evidence for trustworthiness is the process known as a critical appraisal (Mhaskar et al., 2009). In healthcare, it is particularly important to know if a drug or treatment, for example, is safe for patients. Several tools exist to be systematic in this process although they all approach the research with similar principles. These principles identify the strength and weaknesses of the study and methodology, relevance of the study to the research question, importance and need for the research question, biases and conflict of interest and implications for practice (Gough, 2021; Critical Appraisal Skills Programme [CASP], n.d; Joanna Briggs, n.d).

The hierarchy of evidence framework provides a visual

indication of what evidence is best from the top of the pyramid, systematic review and meta-analysis to the bottom, ideas, opinions, and anecdotes (Guyatt et al., 2011). Whilst this provides a strategy or starting point to search the literature, caution is advised, for example, there may be a randomised controlled trial with poor methodology but cohort studies with strong reliability and trustworthiness (Harvey, 2020). Therefore, we must be cautious and approach literature as imperfect and apply critical appraisal first (Berlin & Golub, 2014).

CASP was chosen for the qualitative studies as a generic tool to appraise the strengths and limitations of the research due to being user-friendly and endorsed by the WHO (Long et al., 2020). Only McKenzie et al. (2020) scored positively for all the domains on the CASP tool. Issues for failing to meet all CASP entities were a lack of consideration of the relationship between the researcher and participants and an unjustified or poorly explained recruitment strategy. Cross-sectional or longitudinal studies were judged to be of reasonable standard using the Joanna Briggs Institute checklist (JBI, 2017). Some studies, however, did not explain the sample selection and why it was considered representative (for example, Clifton et al., 2018) and how to evaluate for reliability and honesty in the survey and failed to explain whether they considered confounding variables and how strategies were adopted to discount them.

Literature review themes:

A review of the literature identified several themes: promoting nursing at secondary school; significant others and experience of healthcare; security, promotion, technical roles; friendliness, low pay, being treated differently and finally, career guidance counsellors (CGC's).

Promoting nursing during secondary school

Prosen (2022) was one of the few studies from non-English participants chosen, although their findings matched with other studies exploring gender-defined roles in nursing. This study invited both male and female participants, and whilst both sexes identified altruism and increased opportunities as reasons for their career choice, men focused on management and leadership roles whilst women identified role modelling, positive image focus and caring qualities as their motives. By exploring culture and nursing, Pool (2012) identified that nursing as a career was ‘invisible’ to the participants due to the lack of information and few nursing-related subject choices at school. Pool (2012) used focus groups that were progressively homogenised; from mixed to single sex. Supporting other research on the need to collaborate with parents, Pool (2012) identified a need to reach out to under-represented minorities and for healthcare providers to use more images of men in their promotional materials. Pool (2012) identified pre-disposing influences on the school students’ choices, such as family members’ career choices and the participant’s experiences either

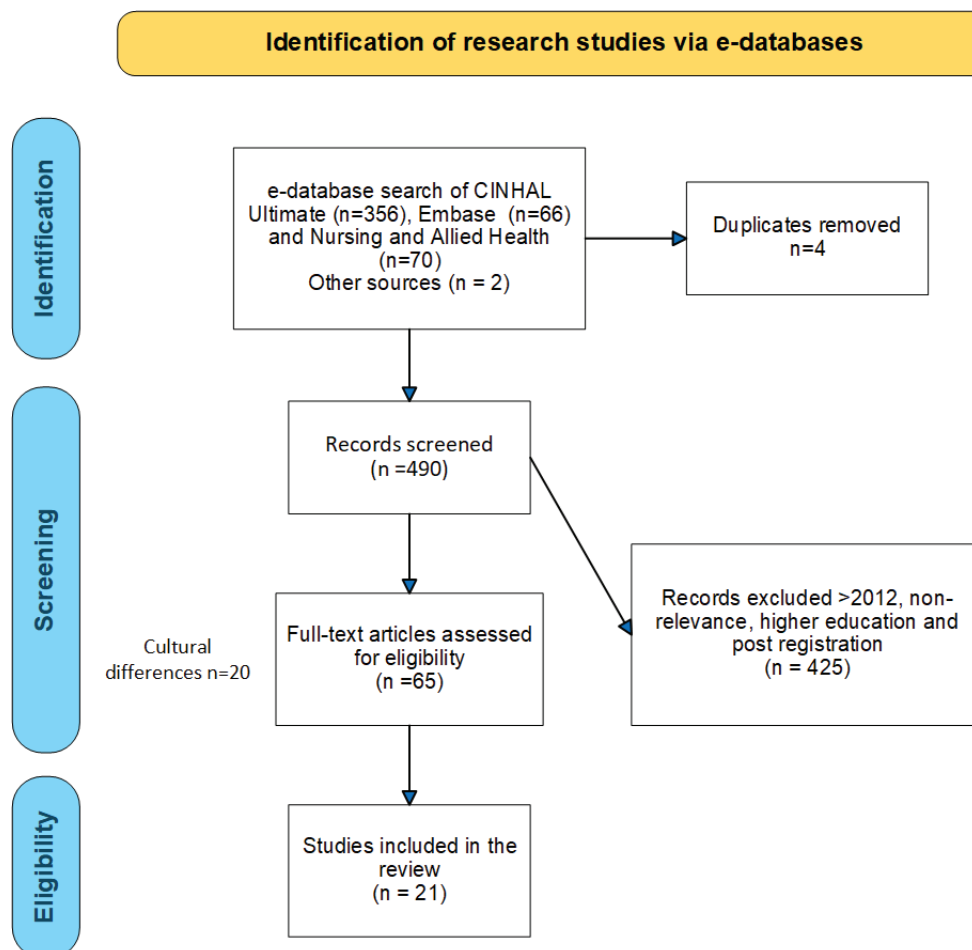


Figure 1: PRISMA flow diagram

as a patient or observational, for example, if a friend or relative had visited in the hospital.

Linden et al. (2022) explored the benefits of promotional videos at a post-primary school in Ireland to identify if this improved the interest in children towards health-related careers. The participants (aged 16 years) were mixed as the researcher did not wish to dissuade girls from participating. The promotional material (including a video) improved the interest in health careers and did not identify significant gender differences within the study. Whilst this was recognised as a positive intervention there was no long-term follow up to identify if this translated to actual career choices in the health-related field.

Table 2: Inclusion and exclusion criteria

Inclusion	Exclusion
In English	Later than 2012
Research studies	Not primary research
Similar to UK culture (e.g. European)	Not culturally relevant

In a Swedish study looking at adolescents making their first education/career choice, researchers examined whether career choice were relevant (Tellhed et al., 2018). While agentic (roles/careers with status) traits were common across genders, communal traits (caring)

for females supported the career choice theory. For example, related to the perception of financial reward versus altruism (Tellhed et al., 2018). Tellhed et al. (2018) supported exploring how to promote nursing to boys in schools, however, they did not apply a methodological design and therefore causality cannot be inferred, and generalisation could not be assumed (Morrison & van der Werf, 2020). In summary, secondary educational schools should be mindful of pervading stereotypical views about nursing and work to develop a non-biased (gender-neutral) approach to the promotion of healthcare roles (DfE, 2023).

Significant others and experience of healthcare

In the only longitudinal study found, Gore et al. (2017) over 4 years, explored career considerations of Australian school children between the ages of 8 and 18yrs of age. In this mixed-method longitudinal study, participants were chosen over the variance of socio-economic groups with a wide geographical area, although it was unclear whether the purposively chosen participants were randomly selected to increase transferability. Using open-ended surveys, the results identified several predictive factors for choosing to nurse such as being female, age, having a parent in that career of choice and prior experience. That said, prior experience was not as statistically significant as sex, age, and parental occupation. The other influencing factor was that nursing is a safe career choice and offers security. Conclusions

from the study were that having exposure to nursing influenced career choice, and identifying strategies to engage school students' interest was important. Engaging students early was identified as influential because aspirations were already established at 10yrs of age (Gore et al., 2017). Gore et al. (2017) also found other competing healthcare roles, such as veterinary practice, physiotherapy, and occupational therapists were options.

The study by Guy et al. (2022) identifies many student nurses enter the profession as a second career rather than a first career. The participants stated there was a lack of understanding of the actual role of the nurse and what nurses do, along with societies perception that nursing is still a female profession. Partners influencing changing a career to nursing were identified as being important in participants' choice and decision-making (Christensen & Knight; 2014 Christensen, 2018). In summary, it is important to recognise the influential factors in choosing a career pathway and that education and support should be provided to family and friends where possible. Also, the importance and role of education, social media and society in formulating these career goals were of significance.

Security, promotion, technical roles

Themes of helping, security, challenging, and variety were identified from a Canadian study of men choosing nursing as a career (Twomey & Meadus, 2016). Other reasons identified were that nursing appeared to be a rewarding career based on the social image of a nurse and its caring responsibilities (Twomey & Meadus, 2016). Also supporting the notion of nursing offering security was the study by Christensen et al. (2021), using an adapted version of the Inventory of Male Friendliness in Nursing Programmes [IMFNP] (O'Lynn, 2004). Security, along with greater social mobility and improved salary were reported by men over several studies and should be incorporated into recruitment advertising to draw and influence more men into nursing (Boughn, 2001; Meadus & Twomey, 2007). Whilst security is cited as a common reason to pursue nursing, it is not clear from the evidence if security alone could sustain an individual in nursing, without other internal motivators such as reward and caring.

Prosen (2022) identified that whilst nursing was considered a worthwhile career it was not necessarily the caring traits that were appealing to the male student participants but rather a career pursuing leadership and management. Extrinsic motivators of finance and security were also noted in other studies (Boughn, 2001). Technical roles in intensive care units/emergency departments, were found to be more popular to men due to their fast-paced nature, demand for physical strength and avoidance of physical threat from patients (Cheng et al., 2018). Other findings were roles with increased autonomy and professional competency (Cheng et al., 2018).

Friendliness, low pay, being treated differently

The research studies reviewed identified there were significant barriers to male students when considering nursing as a career. O' Lynne's (2004) IMFNP was based on gender role conflict (GRC) theory and developed to assess universities 'level of friendliness' and 'level of supportiveness' provided by a nursing school, is indicated by the lack of barriers to men becoming nurses. These barriers included isolation, poor instruction, lack of role models, and use of pronouns for example. Whilst low pay in nursing devalues the profession, nursing is suggested to have been weakened by it being seen as a female profession which relies on or exploits the fact that female nurses historically value care and service over pay (RCN, 2020). Men, pursue managerial or leadership positions to gain financial rewards or pursue alternate professions rather than stay in nursing. The low pay issue continues to discourage men from entering the nursing profession (Clifton et al, 2020).

The descriptive phenomenological study by Powers et al. (2018) explored n=11 participants' experience of their undergraduate nurse training and what motivations and barriers they experienced. Interviewees described the influence of family and friends' being significant in choosing nursing as a career and had to overcome negativity due to nursing being perceived as unmasculine and a 'woman's job'. Whilst this study was retrospective, all participants were now qualified, each male nurse in the study identified that bias existed; they felt treated differently, singled out at times and discussion from lecturers often had a female focus, especially when discussing female anatomy and specific care. Whilst in Powers et al. (2018), the study reproduced findings like other studies in this review, they identified limitations of their study by reporting all the research participants trained in one school of nursing, a third had a second degree and a half were over 30 years of age. In particular, whilst not actually stating it, these limitations relate to the notion of generalisability, however, phenomenology (as a research method) is interested in the uniqueness (individual) of research participants lived experience and when collecting unique experiences into common themes, as is often expected for qualitative research, this may negate any sense of uniqueness (Paley, 2005).

Christensen et al. (2018) explored the lived experience of Australian male student nurses. The study explored the transition from perceived masculine jobs to nursing and the challenges faced. This study identified loneliness, marginalisation and being ostracised as well as them challenges domestically- changes in family dynamics and increased financial insecurities (Christensen et al, 2018). Whilst the internal motivations were to give something back, contribute more to society and a last chance to have influence, the participants also saw nursing as a stable career, but they felt 'stuck for something to do.' The men in this study reported having to exaggerate

Table 3: Table of findings criteria

Author/ year/ country	Aim of study	Methodology	Sampling strategy	Findings
Boughn (2001)	The purpose of study to compare and contrast why women and men choose nursing	Grounded theory methodology	Men/ women were interviewed from an undergraduate nursing over 2 years	Men and women students had equal commitment to care for r patients, differences emerged in the construct of power, strong contrast regarding practical motivations for choosing nursing (e.g. salary and working conditions).
Carnevale & Priode (2018)	To explore male nursing students' perspectives enrolled in an N. Carolina undergraduate programme	Phenomenological group focus using van Manen's data analysis	n=11 aged between 20 and 40	4 themes: exclusion, gender bias, career expectations, and acceptance. Exclusion and gender bias experienced, career expectations motivated them. Acceptance was important
Cheng et al. (2018)	To explore Taiwanese novice men's experience on entry to the workforce	A qualitative descriptive study was conducted using purposive and snowball sampling for recruitment.	n=14 participants aged 21 to 25 years old recruited, all had at least 5 months' work experience. Face-to-face interviews with follow-up telephone interview	6 themes: choosing departments based on personality and needs, facing pressure, frustration, independent work, getting help, acceptance among female cliques, reflecting gender and profession, concern about dependents and financial needs
Christensen and Knight (2014)	The study's aimed to examine the experience of men training to be registered nurses in New Zealand	A narrative analysis approach was used	n=5 men participated, email recruitment	4 key themes were identified: A flexible career and promise; gender inequality in providing care; developing professional boundaries with female colleagues and advantage of being unique
Christensen et al. (2018)	To explore the lived-experience of male students and what attracted them to nursing	A descriptive approach using Husserlian phenomenology	Purposive sampling, n=8 men	7 sub-themes were nursing is for me; wanting a new career; striving to succeed; men together; family approval and realigned mate-ship
Christensen et al. (2021)	Aim of study was to understand the experiences of male nursing students in their first year of training	Using the Inventory of male friendliness in nursing programs and the gender role conflict scale	n=14 men participated, email recruitment	Men felt welcomed, supported and included in the programme. Felt no overall gender-role conflict, feelings of success and achievement caused some challenges
Harmanci et al. (2017)	Designed to identify and compare career choice of students enrolled in nursing at state and private universities	A descriptive cross-sectional design was used of 2 state and 4 private universities in Istanbul	3rd and 4th year students targeted without using a sampling selection. n= 505 of 961 students. Data collecting tool had 43 questions on students' future plans	Career counselling impacted on students' choice of career Majority (52%) had nursing in their top 3 of choices
Jerrim & Sims, (2020).	To explore how grammar attendance affects other outcomes, such as pupils' self-confidence, academic self-esteem and aspirations	A stratified, clustered survey design was used	Applying propensity score matching techniques to data from the Millennium Cohort Study (a nationally representative longitudinal study)	Attending grammar school has very little impact upon pupils' socio-emotional outcomes. Expanding grammar schools is unlikely to benefit pupils in this respect.
Kane et al. (2021)	Explore recruitment/ retention of male nursing students enrolled in an undergraduate nursing program	Descriptive qualitative design	Snowball sampling to recruit male nursing students (n = 17) to focus groups	Encountered stereotypical views about their masculinity, acceptance an issue, especially in obstetrics with gender bias, societal views about male gender, there were 'islands' of masculinity e.g. emergency department, critical care
Kelleher et al. (2012)	Exploring general pupils' (15-18 years old) experience of career guidance counsellors in S. Ireland	Questionnaire design	85% mentioned nursing as a career option Questionnaire asked boys and girls	2.6% did not mention nursing in boys schools. The majority were over 50 years old and had over 10yrs experience as CGC's, their view of male nursing was biased.
Gore et al. (2017)	Aim to understand patterns and predictors related to improved nursing recruitment among school students	A four-year longitudinal mixed methods study in New South Wales, Australia	Survey data collected annually for 5 years. n=553 students accessed an open-ended survey, responses analysed to investigate reasons for interest in nursing	Predictors of interest included being female, having a parent in nursing occupation, 'helping orientation' and prior experience of nursing perceived as a 'safe' career choice job security, desire to care. Other students interested in 'caring' careers.
Guy et al. (2022)	Identify factors impacting why men do not chose a nursing career in New Zealand	Convenience sampling Data analysed using Braun / Clarke's thematic analysis	n=9 qualified male nurses within first three years post qualifying	2 key themes: men in nursing experience isolation due to the societal gendering of nursing influencing their prior Nursing not prominent in their awareness when leaving school

Linden et al. (2022)	Tested a post-primary school-based intervention to recruit more males into the nursing profession in N. Ireland	Acceptability testing of a designed intervention to promote nursing to males Statistical analysis	n=34 females from an all-girls school n=15 mixed school n=52 males from an all-boys school	No statistically significant differences in perceptions found between males and females after watching video the intervention. Students from the all-girls school rated more positively than those from all-boys and mixed-gender schools
McKenzie et al (2020)	To identify factors associated to consider a career in mental health	Quantitative, observational online survey	Views of n=231 participants (female = 188, 81.7%) aged between 16–65 (mean = 22.7, SD = 8.9)	(71.2%) participants reported they would probably/ definitely consider a career in mental health, (51.4%) would consider a career as a mental health nurse. Helping others, appropriate training is important. Being female with a mental health condition associated significantly to a greater likelihood considering a career in mental health
Meadus & Twomey (2007)	To explore why men, choose nursing as an occupation? Identifying perceived barriers for men working in a female-oriented profession?	self-report survey as the data collecting tool	n=250 male registered nurses in Newfoundland and Labrador were the target	Sexual stereotypes, lack of recruitment strategies, female-oriented profession, lack of exposure to male role models in the media. Recruitment strategies should focus on factors important to men: job security, career opportunities and salary.
O' Lynne's (2004)	To explore prevalence and perceived importance of barriers to develop a tool to measure male friendliness in nursing programs	A pilot tool and questionnaire with 33 barriers obtained from literature, sent to participants to rate	n=200 male nurses Inventory of M male friendliness in nursing programmes was identified (IMFNP)	Barriers included isolation, poor instruction, lack of role models, use of pronouns, low pay devalues the profession
Pool (2012)	Exploring how to recruit minority Pacific population in New Zealand and provide a workforce matching the demographics of the society	Qualitative research design, descriptive interpretation via focus group interviews	Recruitment from 2 secondary schools 5 focus groups (boys or girls/ or mixed) with n=34 participants	Influences on school students' choices were family members' career choices, experience as a patient or observational
Powers et al. (2018)	To explore the lived experience of former male nursing students	A descriptive phenomenological approach was used	n=11 males formerly pre registered training	Five themes: gender bias exists, being singled out, doing manly stuff, (limitations in clinical settings, and no male role models
Prosen (2022)	Explore male and female nursing students' experiences/ perspectives of gender-defined roles and how they view future professional roles.	Descriptive qualitative design convenience sample, content analysis of male and female perspectives	n=72 second- and third-year undergraduate students. qualitative questionnaire with 11 essay-type questions.	Eight themes Students choose nursing for altruistic, opportunistic and organisational reasons. Females have "family and social incentives" attitudes of altruism and positive representations of 'being a nurse',
Tellhed et al. (2018)	Study of Swedish adolescents making their first educational choice, and career goals,	Tested for gender differences using measures of ability beliefs and career	12 randomly selected schools in municipalities representing three "big cities", eight "smaller cities" and one "sparsely populated area" n=611 males, n= 577 females, average age 15	Strong gender differences in high-tech ability beliefs (computers), social ability beliefs (listening skills), communal career goals (helping) explained gender differences in educational choice
Twomey & Meadus (2016)	To explore why men chose nursing in Canada	Descriptive design convenience and snowball sampling	n=240 men Questionnaire design	Reason given were helping people, job security, challenging and professional role, variety of career options, caring and contribution to society

their sexuality, distanced themselves from washing and feeding patients and gravitated towards areas that were fast-paced and needed advanced clinical knowledge.

Christensen et al. (2021) identified male student nurses in practice were concerned about the misinterpretation of sexuality or deviancy and touch, related to intimate female patient care. This was supported in an earlier study when identifying an unwritten rule concerning male nurses and female intimate care (Christensen & Knight, 2014; Carnevale & Priode, 2018) with male nurses being asked to discontinue care of female patients or restricted to work only with male patients. However, this inconsistency was felt to be unfair because the research

participants were aware of female nurses involved in intimate male patient's care without any sense of mistrust (Christensen & Knight, 2014). Whilst participants felt they had to work harder, experienced discrimination and reduced opportunities in practice, they also saw the benefit of being seen as different on a ward. The male nurses recognised opportunities for travel, earlier promotion, and career advancement upon registration (Christensen & Knight, 2014).

Bias was identified in Carnevale and Priode's (2018) phenomenological study before entry into the nursing programme and once enrolled. Four themes emerged from the study; exclusion, gender bias, career aspiration

being negative, and acceptance felt by the participants as positive (Carnevale & Priode, 2018). Barriers identified by Twomey and Meadus (2016) to a career in nursing for men were the perception of needing to be masculine, inadequate recruitment, lack of role models and the perception nursing was a female dominated profession. Prosen (2022) also identified that the men in their study (n=14) needed to prove themselves with masculine traits and when it came to identifying a specific career, they tended to focus on roles requiring technical skills, leadership, and knowledge. The theme related to career guidance counsellors is discussed next.

Career Guidance Counsellors (CGC's)

Kelleher et al. (2012) explored the effectiveness of CGC's to restore the diminishing nursing workforce. The focus of this study was not to differentiate boys and the girl's unique experiences but to look at the general pupils' (15-18 years old) experience. A questionnaire was used as an instrument to establish what these CGC's thought about nursing as a career choice. Whilst most of the respondents (85%) mentioned nursing as a career option it was not established how this was delivered; did some boys have a distinct experience to the girls when it came to delivering this information? Of concern, 2.6% did not mention nursing which could be explained by the CGC's who worked in a boy's school. Of the respondents from this study, participants identified the majority of CGC's were over 50 years old and whilst they all had over 10yrs experience as CGC's, their view of male nurses was biased.

Harmanci et al. (2017) explored the comparative approaches of state versus private education regarding career advice. Whilst there were influencing factors in the respondent's choice of career, such as aspirations, family, and ease of finding a job, the researchers noted there were significant differences in private universities receiving more career guidance and advice over their public sector counterparts. Nonetheless, the recommendations were that both private and state education routes would benefit from career guidance from experts.

Guy et al. (2022) also noted that CGC's negatively influenced boys away from careers not traditionally viewed as 'masculine.' Notably, Jerrim and Sims (2020) identified, after applying propensity score matching techniques to the Millenium Cohort Study (n.d), that single-sex schools reinforced a traditional view of gender and careers, suggesting boys-only schools were influenced by parents and religion. Kane et al. (2021) equally noted the lack of support from careers advisors in their Canadian study and summarised the need for strategies to recruit more men into nursing, such as nursing participation in school, recruitment material for high school counsellors and careers fairs.

Conclusion

This literature review aimed to explore why for decades Western societies consistently have between 9-11% men in the nursing workforce. Despite unprecedented vacancies in nursing Worldwide, themes identified; gender bias in society, secondary schools, further education, and the influence of significant others to boys' career choices. The NHS Equality, diversity, and inclusion improvement plan an attempt to develop a "... diverse workforce... representative of the communities it serves..." (NHSE, 2023, p. 6), only referred to women and gender, and not men. In secondary schools, and boys-only schools, parents, religion, the lack of health-related subjects taught, and career guidance counsellors (CGS's) were identified as key themes. Influencing a decision to consider nursing as a man, partners, family, and friends paralleled dominant stereotypical views about nursing. HEI's were also found to have an impact on how nursing is perceived by men and need to develop visual images and information attracted to men in their online recruitment resources. When in the workforce, male nurses reported the opportunity to travel, specialising in technical roles, career advancement, being seen as unique and job security to be motivational factors. However, they also reported issues of friendliness, (mis)trust, being viewed as a minority, poor pay and not feeling included. To conclude, it is important to consider the NHS and nursing to have a diverse workforce and be representative of the community it serves (NHSE, 2023), and one of those inclusive issues in the 21st century continues to relate to men and boys' choice of career options.

References

- Aspden, T., Cooper, R., Yue Lui, Marowa, M., Rubio, C., Waterhouse, E.J., Sheridan, J. (2015). What secondary school career advisors on New Zealand know about pharmacy and how that knowledge affects student career choices. *American Journal of Pharmaceutical Education*, 79(1), 1-8. <https://doi.org/10.5688/ajpe79107>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*. 84 (2): 191-215.
- Berlin, J.A, Golub, R.M. (2014). Meta-analysis as evidence: Building a better pyramid. *Journal of the American Medical Association*. 312(6):603–606. <https://doi.org/10.1001/jama.2014.8167>
- Boughn S. (2001). Why women and men choose nursing. *Nursing Health Care Perspectives*. 2001;22(1):14-9
- Buchan, J., Catton, H., Shaffer, F. (2022) The global nursing workforce and the COVID-19 pandemic. International Center on Nurse Migration, Philadelphia, PA
- Burke, A.M., & Embrick, D.G. (2020). Determinism, Biological. *International Encyclopedia of the Social Sciences*. <https://www.encyclopedia.com/social-sciences/applied-and-social-sciences-magazines/determinism-biological>
- Carnevale, T., Priode, K. (2018). The good ole girls nursing club: The male student perspective. *Journal of Transcultural Nursing*, 29(3), 285-291. <https://doi.org/10.1177/10433659617703163>
- Cheng, M.L., Tseng, Y.H., Hodges, E., Chou, F.H. (2018).

- Lived experiences of novice male nurses in Taiwan. *Journal of Transcultural Nursing*, 29(1):46-53. <https://doi.org/10.1177/1043659616676318>
- Chong, J. (2005). Biological and social construction of gender differences and similarities: A psychological perspective. *Review of Communication*, 5(4), 269-271. <https://doi.org/10.1080/15358590500420589>
- Christensen, M., Knight, J. (2014). Nursing is no place for men — A thematic analysis of male nursing students experiences of undergraduate nursing education. *Journal of Nursing Education and Practice*, 4(12). <https://doi.org/10.5430/jnep.v4n12p95>
- Christensen, M., Welch, A., Barr, J. (2018). Nursing is for men: A descriptive phenomenological study. *Contemporary Nurse: A Journal for the Australian Nursing Profession*, 54(6), 547-560. <https://doi.org/10.1080/10376178.2018.1512876>
- Christensen, M., Purkis, N., Morgan, R., Allen, C. (2021). Does the nursing curriculum influence feelings of gender-role conflict in a cohort of nursing degree male students? *British Journal of Nursing*, 30(17), 1024-1030. <https://doi.org/10.12968/bjon.2021.30.17.1024>
- Clifton, A., Higman, J., Stephenson, J., Navarro, A.R., Welyczko, N. (2018). The role of universities in attracting male students on to pre-registration nursing programmes: An electronic survey of UK higher education institutions. *Nurse Education Today*, 71, 111-115. <https://doi.org/10.1016/j.nedt.2018.09.009>
- Clifton, A., Crooks, S., Higman, J. (2020). Exploring the recruitment of men into the nursing profession in the United Kingdom. *Journal of Advanced Nursing*, 76(8), 1879-1883. <https://doi.org/10.1111/jan.14370>
- Coventry University (2017). University tackles nursing gender gap with first bursary for men. <https://www.coventry.ac.uk/primary-news/university-tackles-nursing-gender-gap-with-first-bursary-for-men/>
- Critical Appraisal Skills Programme UK. (n.d.). CASP checklists. <https://casp-uk.net/casp-tools-checklists/>
- Dayan, M., Herve, T., McCarey, M., Fahy, N., Flear, M., Greer, S.L., Jarman, H. (2024). The future for health after Brexit. <https://www.nuffieldtrust.org.uk/research/the-future-for-health-after-brexite>
- Department for Education (2023). Careers guidance and access for education and training providers. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1127489/Careers_guidance_and_access_for_education_and_training_providers.pdf
- Eagly A.H. (1987). Sex differences in social behavior: A social-role interpretation. Hillsdale, NJ: Erlbaum.
- Eagly, A.H., Sczesny, S. (2019). Editorial: Gender roles in the future? Theoretical foundations and future research directions. *Frontiers in psychology*, 10, 1965. <https://doi.org/10.3389/fpsyg.2019.01965>
- Eccles, J.S. (1987). Gender roles and women's achievement-related decisions. *Psychology of Women Quarterly*, 11(2), 135-172. <https://doi.org/10.1111/j.1471-6402.1987.tb00781.x>
- Eccles, J.S. (1994). Understanding women's educational and occupational choices: Applying the Eccles et al. model of achievement-related choices. *Psychology of Women Quarterly*, 18(4), 585-609. <https://doi.org/10.1111/j.1471-6402.1994.tb01049.x>
- Evans, J.A. (2001). Men and nurses and masculinities: Exploring gendered and sexed relations in nursing. Halifax. Dalhousie University.
- Fiske, S.T., Durante, F. (2016). Stereotype content Across cultures: Variations on a few themes. Michele J. Gelfand, Chiyue Chiu, and Ying-yi Hong (eds), *Handbook of Advances in Culture and Psychology*, 6, <https://doi.org/10.1093/acprof:oso/9780190458850.003.0005>
- Ford, M. (2019). Focus: Men in nursing- tipping the gender balance. <https://www.nursingtimes.net/news/workforce/focus-men-in-nursing-tipping-the-gender-balance-06-03-2019/>
- General Medical Council (2021). 2021 at a glance. https://www.gmc-uk.org/-/media/documents/gmc-2021-at-a-glance_pdf_92029623.pdf
- Gore, J., Rickards, B., Fray, L., Holmes, K., Smith, M. (2017). Profiling Australian school students' interest in a nursing career: Insights for ensuring the future workforce. *Australian Journal of Advanced Nursing*, 35(2), 12-22. <https://www.ajan.com.au/archive/Vol35/Issue2/2Gore.pdf>
- Gough, D. (2021). Appraising evidence claims. *Review of Research in Education*, 45(1), 1-26. <https://doi.org/10.3102/0091732X20985072>
- Gov.uk (2023). Find and check the performance of schools and colleges in England. <https://www.gov.uk/school-performance-tables>
- Guyatt, G., Oxman, A.D., Akl, E.A., Kunz, R., Vist, G., Brozek, J., Norris, S., Falck-Ytter, Y., Glasziou, P., de Beer, H., Jaeschke, R., Rind, R., Meerpohl, J., Dahm, P., Schünemann, H.J. (2011). GRADE guidelines: 1. Introduction—GRADE evidence profiles and summary of findings tables. *Journal of Clinical Epidemiology*. 64(4):383-394. <https://doi.org/10.1016/j.jclinepi.2010.04.026>
- Harmanci, A.K., Bacaksiz, F.E., Baykal, U. (2017). Career orientations of nursing students: A comparison of state and private universities. *International Journal of Caring Sciences*, 10(1), 273-284. https://internationaljournalofcaringsciences.org/docs/31_eskin_original_10_1.pdf
- Harvey, E. (2020). Can we use levels of evidence to make a decision. *Canadian Journal of Surgery*. *Journal Canadien de Chirurgie*, 63(1), E86. <https://doi.org/10.1503/cjs.001920>
- Hutchings, R. (2024). Pay setting for doctors and nurses: what can the NHS learn from other countries? <https://www.nuffieldtrust.org.uk/news-item/pay-setting-for-doctors-and-nurses-what-can-the-nhs-learn-from-other-countries>
- Jerrim, J., Sims, S. (2020). The association between attending a grammar school and children's socio-emotional outcomes. new evidence from the millennium cohort study. *British Journal of Educational Studies*, 68(1), 25-42. <https://doi.org/10.1080/00071005.2018.1518513>
- Joanna Briggs Institute (n.d). Checklist for analytical cross-sectional studies. https://jbi.global/sites/default/files/2019-05/JBI_Critical_Appraisal-Checklist_for_Analytical_Cross_Sectional_Studies2017_0.pdf
- Kane, D., Rajacich, D., Andary, C. (2021). Exploring the contextual factors surrounding the recruitment and retention of men in a baccalaureate nursing program. *Nursing Forum*, 56(1), 24-29. <https://doi.org/10.1111/nuf.12504>
- Kelleher, S., O'Connor, C.D. (2012). Strategies in the promotion of nursing as a career among second level students: An Irish perspective. *International Journal of Nursing Education*, 4(2), 124-128. <https://doi.org/10.5958/j.0974-9357.5.1.045>
- Linden, M.A., Mitchell, G., Carlisle, S., Rainey, D., Mulvenna, C., Monaghan, C. (2022). Recruiting males to the nursing profession: Acceptability testing of the 'Make a difference with nursing' intervention for post-primary school students. *BMC Nursing*, 21(1), 1-7. <https://doi.org/10.1186/s12912-022-00956-5>
- Long, H.A., French, D.P., Brooks, J.M. (2020). Optimising the value of the critical appraisal skills programme (CASP) tool

- for quality appraisal in qualitative evidence synthesis. *Research Methods in Medicine & Health Sciences*, 1(1):31-42. <https://doi.org/10.1177/2632084320947559>
- Mackintosh, C. (1996). A historical study of men in nursing. *Journal of Advanced nursing* Vol. 26, pp 232-6 <http://doi.org/10.1046/j.1365-2648.1997.1997026232.x>
- Mao, A., Wang, J., Zhang, Y., Cheong, P.L., Van, I.K., Tam, H.L. (2020). Factors influencing recruitment and retention of male nurses in Macau and mainland China: A collaborative, qualitative study. *BMC Nursing*. 19(1):104. <https://doi.org/10.1186/s12912-020-00497-9>
- Mhaskar, R., Emmanuel, P., Mishra, S., Patel, S., Naik, E., Kumar, A. (2009). Critical appraisal skills are essential to informed decision-making. *Indian journal of sexually transmitted diseases and AIDS*, 30(2), 112-119. <https://doi.org/10.4103/0253-7184.62770>
- McKenzie, K., Murray, A., Cooper, M., Martin, R., Murray, K., Baguley, C., Chiscop, A. (2020). An exploration of the factors influencing career choice in mental health. *Journal of Clinical Nursing* (John Wiley & Sons, Inc.), 29(19), 3764-3773. <https://doi.org/10.1111/jocn.15406>
- Meadus R.J., Twomey J.C. (2007). Men in nursing: Making the right choice. *Canadian Nurse*, 103(2), 13-16
- Meadus, R.J., & Twomey, J.C. (2011). Men student nurses: The nursing education experience. *Nursing Forum*, 46(4), 269-279.
- Morrison, K., van der Werf, G. (2020) Methods, understandings, and expressions of causality in educational research, *Educational Research and Evaluation*, 26, 7-8, 339-343, <https://doi.org/10.1080/13803611.2021.1991643>
- Millennium Cohort Study. (n.d). Centre for longitudinal studies. University College London. <https://cls.ucl.ac.uk/cls-studies/millennium-cohort-study/>
- National Health Service England & NHS Improvement (2019). Interim NHS people plan. <https://www.longtermplan.nhs.uk/wp-content/uploads/2019/05/Interim-NHS-People-Plan-June2019.pdf>
- National Health Service Digital (2022). NHS vacancy statistics England April 2015 – June 2022 Experimental Statistics. <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-vacancies-survey/april-2015---june-2022-experimental-statistics#>
- National Health Service England (2023). The NHS Equality, diversity and inclusion improvement plan. NHSE. <https://www.england.nhs.uk/long-read/nhs-equality-diversity-and-inclusion-improvement-plan/>
- National Health Service Business Support Authority. (2024). Student services, learning support fund: Financial support for healthcare students 2023/24 <https://www.nhsbsa.nhs.uk/sites/default/files/2024-04/NHS%20LSF%20guidance%20booklet%202023-24%20%28V3%29%2004.2024%20-%20ac%20checked.pdf>
- Nursing and Midwifery Council (2017). Annual equality, diversity and inclusion report: 2016-2017. https://www.nmc.org.uk/globalassets/sitedocuments/annual_reports_and_accounts/edi/edi-report-2016-2017.pdf
- Nursing Registration Act (2019). <https://navigator.health.org.uk/theme/nurses-registration-act>
- O'Lynn, C.E. (2004). Gender-based barriers for male students in nursing education programs: prevalence and perceived importance. *Journal of Nursing Education*, 43(5), 229-236. <https://doi.org/10.3928/01484834-20040501-08>
- Office of National Statistics (2022). Population estimates for the UK, England, Wales, Scotland and Northern Ireland: mid 2021. <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2021>
- Paley, J. (2005). Phenomenology as rhetoric. *Nursing Inquiry*; 12: 106-116.
- Pool, L. (2012). How culture influences choosing nursing as a career. *Whitireia Nursing Journal*, (19), 27-42.
- Powers, K., Herron, E.K., Sheeler, C., Sain, A. (2018). The lived experience of being a male nursing student: Implications for student retention and success. *Journal of Professional Nursing*, 34(6), 475-482. <https://doi.org/10.1016/j.profnurs.2018.04.002>
- Prosen, M. (2022). Nursing students' perception of gender-defined roles in nursing: A qualitative descriptive study. *BMC Nursing*, 21(1), 1-11. <https://doi.org/10.1186/s12912-022-00876-4>
- Ramsey, L.R. (2017). Agentic traits are associated with success in science more than communal traits. *Personality and individual differences*, 106, 6-9. <https://doi.org/10.1016/j.paid.2016.10.017>
- Royal College of Nursing (2020). Gender and nursing as a profession: Valuing nurses and paying their worth. <https://www.rcn.org.uk/professional-development/publications/pub-007954#:~:text=Gender%20and%20Nursing%20as%20a%20Profession.%20This%20report%20explores%20and>
- Tellhed, U., Bäckström, M., Björklund, F. (2018). The role of ability beliefs and agentic vs. communal career goals in adolescents' first educational choice. what explains the degree of gender-balance? *Journal of Vocational Behavior*, 104, 1-13. <https://doi.org/10.1016/j.jvb.2017.09.008>
- Twomey, J.C., Meadus, R. (2016). Men nurses in Atlantic Canada: Career choice, barriers, and satisfaction. *The Journal of Men's Studies*, 24(1), 78-88. <https://doi.org/10.1177/1060826515624414>
- University of Dundee (2017). Do enough men care? University challenges nursing crisis. <https://app.dundee.ac.uk/news/2017/do-enough-men-care-university-challenges-nursing-crisis.php>
- World Health Organisation. (2016). Global strategy on human resources: Workforce 2030. <https://iris.who.int/bitstream/handle/10665/250368/9789241511131-eng.pdf>
- World Health Organisation. (2022). The Global health observatory: Nurses by sex. [https://www.who.int/data/gho/data/indicators/indicator-details/GHO/nurses-by-sex\(-\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/nurses-by-sex(-))

Author Biographies

David Stein

 <https://orcid.org/0009-0009-6774-1974>
Senior Lecturer in Pre-Registration Adult Nursing, School of Nursing and Midwifery, University of Central Lancashire.

David Stein is a senior Lecturer in Pre-Registration Adult Nursing within the School of Nursing and Midwifery at the University of Central Lancashire.

Paul Regan

 <https://orcid.org/0000-0002-8775-933x>
Senior Lecturer in adult nursing, School of Nursing and Midwifery, University of Central Lancashire.

Before joining the pre-registration team at UCLan in 2010, Paul worked in the NHS for 28 years from 1982-

2010. Paul has clinical experience of adult nursing, acute mental health nursing and as a generic health visitor.