What can surgical associations do to encourage more women to pursue a career in surgery?

In 1915, Britain's first female surgeon, Dame Louisa Aldrich-Blake (1865-1925), travelled to Paris to assist the Anglo-French red cross at a 600-bed field hospital - Abbaye de Royaumont. A pioneering surgeon, she quickly gained the respect of her fellow surgeons and patients, who named her as 'Madame Générale ' as a sign of respect, thus challenging the reservations the War Office initially expressed about employing female medical staff. (1) She also helped to recruit other female registrars in her endeavour, helping to pave the way for future women in surgical specialities and all branches of medicine in the UK.

A century later, the proportion of female medical professionals has shifted dramatically, the percentage of female medical school graduates in the UK climbing from 10% in the 1960s to over 50% in the early part of this century. (2) Despite this, the increased proportion of female junior doctors does not extrapolate to the proportion of female surgeons; in 2018, NHS Digital reported that just 14.5% of surgical consultants were women. The speciality with most significant sex discrepancy in consultants was Trauma & Orthopaedics, in which only 4.5% of consultants were female. (3)

The statistics are staggering; however, it is not unrealistic to assume that the lag in the number of women training for consultancy exaggerates them. It can take a 15-20 year period to train a surgical consultant from scratch. (4) There have only been five 20-year periods since the first-ever British female surgeon, so perhaps we should take these statistics in the context of the past rather than a representation of the future. Perhaps more worrying is the disparity between the number of women who enter training and those who become consultants. But why do surgical specialities struggle to attract and retain women?

A survey in 2017 published in the BMJ Open Journal asked 81 women, representing all levels of surgical training, about their perceptions and experience of surgery in the UK to investigate the challenges women face and the potential to initiate 'action-orientated change'. (5) The survey revealed that 88% of participants perceived surgery as a male-dominated field; 58% had experienced discrimination, and 22% perceived a 'glass ceiling' in their surgical training. Common themes raised in this survey included conflict between personal and career decisions, female under-representation, rigidity in surgical training, self-limiting beliefs and discrimination from others. The challenges women face in surgery are frequent and significant, but it is hard to determine who should take action.

According to the Royal College of Surgeons, surgical associations are 'expert groups that represent the interests and set standards for the varying surgical specialities, techniques and patient groups.' (6) Surgical associations are in a prime position to support the interests of practising female surgeons and encourage future generations of excellent potential female surgeons that may be lost to other specialities. Increased diversity in surgery may create a more balanced environment that is more representative and relatable to the general population that surgical specialities treat.

This essay will outline some of the commonly cited challenges facing women in surgery; some possible solutions and the role that surgical associations might play.

Surgery has long since been considered a 'boys club', and although a blanket statement cannot be made about whether 'surgery is sexist' or not it is impossible to discuss the challenges facing women in surgery without addressing sexism.

As defined by the Cambridge Dictionary, sexism is *'(actions based on) the belief that the members of one sex are less intelligent, able (and) skilful.* (7)

In July 2020, the Journal of Vascular Surgery published a controversial article into the "prevalence of unprofessional social media content among young vascular surgeons". The study claimed to investigate the impact of social media use in young surgeons upon professional reputation. The male-led team's parameters to describe 'potentially unprofessional content' caused controversy. Their definition of "inappropriate attire", included "provocative posing in bikinis/swimwear". Criticism of this went viral online, prompting female doctors on social media to question whether men had the right to define what constitutes 'provocative clothing' on the female body and its relevance to surgical prowess. For example, would a picture of a man in swimming trunks be considered inappropriate attire for an off-duty surgeon? (8)

This study is significant as it has brought to light the dissatisfaction of women working within the surgical environment, where they feel held to higher standards than their male counterparts. Surgical associations can combat this by adopting a zero-tolerance policy to sexism and discrimination. They should hold their members to these principles and support women in whistleblowing where discrimination occurs - this could be through regular surveys where the data collected could be used by organisations to implement change. Alternatively, associations could run sessions to provide individuals with confidential advice and support concerning discrimination in the workplace, including how individuals can whistleblow within their NHS trust if necessary.

In my own, albeit limited, experience as a medical student, I have found male consultants who are happy to teach me and let me assist in theatre, appropriate to my clinical experience, of course. However, there is a consensus between my female colleagues that subtle variations exist between the way different sexes are treated in surgical education, with women feeling that they have to work harder to get the same guidance and mentorship as male counterparts. It is important to recognise that there may be a slight overlap between actual and perceived discrimination. If a female student is uncomfortable, she might appear less engaged, and the clinician may feel less motivated to teach, creating a vicious loop of anxiety and neglect.

Associations could encourage more female surgeons by building relationships with medical schools and endorsing female-orientated surgical educational opportunities, including practical skills courses, lectures and research opportunities. These opportunities would engage students early and make female students feel valued as prospective surgical trainees.

It is commonly thought that gender imbalances in surgical specialities are inevitable due to the rigid surgical training pathway overlapping with young women's childbearing years. Often women feel forced to choose between starting a family and career progression. In reality, quantitative studies suggest that having a child during surgical training does not negatively impact final grades or lead to an increased risk of attrition. (9) However, some studies have found that child-rearing leads to a lag in mothers behind their male counterparts in later career progression. (10)

Surgical training requires sacrifice (unsociable working hours and a high workload) which can be incompatible with family life; however, so does all medical training. Inflexible surgical training creates a self-fulfilling scenario in which the nature of surgical training is inhospitable to women or for others who may wish to work less than full time. Therefore, women choose to not apply for these surgical training programmes, and there is no great demand for change. A 2006 survey found that 36% of female and 24% of male medical students would be more interested in pursuing surgery if part-time training were available. (11)

Surgical associations can overcome the preconception that surgeons cannot be mothers by demystifying the surgical training programme through 'Q&A' sessions about different surgeon experiences with work, life and family balance. Also, surgical associations could facilitate communication between surgical trainees and training providers, using petitions, to improve flexible training availability. As quoted by Elizabeth Blackwell, an American physician and one of the first practising female doctors in the UK, 'If society will not admit of woman's free development, then society must be remodelled'. (12) This may attract more women and widen the pool of talent applying to surgical trainee pathways in general.

Another challenge for aspiring surgeons is self-limitation; obtaining self-confidence required to overcome the many difficulties women face in the surgical profession may be the most significant obstacle. Surgical associations can empower women by celebrating successful female surgeons and employing them as ambassadors, providing female surgical role models and normalising women in surgery. Associations also represent a unique opportunity for female surgeons to interact with one another, building a community. This community could address the lack of appropriate mentorship for women pursuing surgery. Surgical associations could establish and foster these mentorships between junior doctors and surgeons facilitating guidance, pastoral support and career advice. (13)

In summary, women face many challenges in entering and working within the surgical profession. These include: - gender statistics, discrimination, perceived inflexibility of training programmes, a lack of female role models, mentorship and the self-limiting beliefs women hold themselves. All of these factors contribute to the shortage of female surgeons. Surgical associations can help women overcome these challenges by developing action plans to solve speciality-specific problems that female surgeons face; liaising with training providers to build flexible training programmes; implementing zero-tolerance policies regarding sexism; providing engaging learning opportunities for young professionals and supporting their female members to build communities.

Some of these measures have already been successfully implemented in recent years, and I believe numbers of female surgical trainees will continue to grow with surgical associations support.

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