**WHAT CAN SURGICAL ASSOCIATIONS DO TO ENCOURAGE MORE WOMEN TO PURSUE A CAREER IN SURGERY?**

**“Technically, according to the notion of the will of God,**

**there is no such a thing as a competent surgeon.”** *- Mokokoma Mokhonoana*

*I* listened to a talk given by a young general-surgeon recently, who admitted she has had to change her daughters’ nursery *three times* due to her training commitments. She laughed nervously at this admission. This anecdote gives me a small insight into a well known statistic; the ratio of male to female consultant surgeons in the UK is approximately 8:1(1). Yet, over half of medical-students are women (2). Allow me to argue that this skewed statistic indicates a *problem* worth fixing.

A 2017 BMJ-Open survey, conducted anonymously laid out some uncomfortable truths (4). There were 81 participants across a number of surgical-specialties at various stages of training. 88% felt surgery is a male-dominated field, particularly T&O, and sadly; 59% of participants said they had experienced sexism. If we delve deeper into this same survey, 34% said they felt the surgery was anti-family. 34% expressed childcare was difficult in part due to unsociable working hours. Is surgery an *old boys club*? Well, 16% of those surveyed felt it is.

Lack of visibility can lead an impressionable female to believe there is something inherently unpleasant in the culture, that in itself becomes a repellent. A chicken-and-egg paradigm. Work-life-balance is a problem that plagues *all* specialties, not least surgery. If we were to theoretically even the playing field and somehow eliminate barriers such as sexism and social factors – would women *still* pursue surgery? This brings us an important question – should surgical societies improve the balance of genders with a view to equality of *outcome* or equality of *opportunity*? I put it to you, that the only barrier to women pursuing surgery should be her *merit,* her *technical prowess* and the degree of *motivation*. Bellini of Imperial College London, who authored this study, stated that often it was the patients themselves held biases associated with historical associations of male surgeons (5). That is to say, women themselves are also a barrier. Which brings us back to visibility. GPs have patient-practice meetings where patients and clinicians actively engage and give feedback and education. Would a similar set-up in surgical departments be beneficial to addressing this unconscious bias? I think so.

**“You look better than sleep.”** *- Kimberly Kincaid*

Emergency life-saving operations do not limit themselves to a 9-5 (!). In my own experience of the workplace, I would have expected flexibility in working shifts and training-pathways would already have been addressed by Trusts to improve cover around the clock, but it has not. Its illogical to allow trainees to forfeit their hard-earned invaluable skill quitting a profession that rigidly will not accommodate them in *basic* life endeavours. Many medical and non-medical pathways in the UK have accounted for re-skilling post-maternity-leave; surgery has not caught up. Unions are simply not fulfilling their basic obligations to their patrons. There are many personal factors driving men and women to take a break, research for example. Why should a woman, a highly-skilled one no less, be discounted after maternity-leave? Its draconian. Elizabeth Garrett would be turning in her grave.

**“Medicine is so broad a field, so closely interwoven with general interests, dealing as it does with all ages, sexes and classes, and yet of so personal a character in its individual appreciations, that it must be regarded as one of those great departments of work in which the cooperation of men and women is needed to fulfill all its requirements.”** *– Elizabeth Blackwell*

I am an RAF-Medical-Support-Officer and I can draw from my personal experience of working in a male-dominated environment. If we contrast with the military, it is commonplace to see nurseries and pre-schools on site and accommodation ad hoc. In 2017 the RAF made all roles open to women, this follows on from a realization that when deploying it was servicewomen rather than men who were better placed to communicate with female natives and gather intelligence. Furthermore, comradery and morale is *strengthened* by the presence of women. If women have been key to the success of our nations’ military operations in austere environments, they can certainly add the same value to surgical teams. This was achieved with improving visibility (we’ve seen the recruitment Ads on television) and specific outreach. Women have a special skill-set; emotional-intelligence, comparable hand-eye co-ordination, an ability to galvanize teams and diligence. A population-based, retrospective, matched cohort-study from 2007-2015 published in the BMJ in 2017 demonstrated that when after accounting for patient, surgeon and hospital characteristics, patients treated by female surgeons had a small but statistically significant decrease in 30-day mortality and comparable surgical outcomes versus male surgeons (6). This information should be more widely disseminated than it currently is. Surgical associations have a responsibility to do this. However, this is preaching to the choir until these truths are made available to the wider medical community and students. These facts are myth-busting and sew seeds of confidence in those who might otherwise make worthy surgeons but are deterred by misconceptions from the outside looking in.

The information we are fed daily is akin to fast food. We absorb unconscious biases and information increasingly from sources such as social media. Do female surgeons have a responsibility to shine a light on their journey, their intimate professional experiences? Their altruism is important. We tend to remember faces we see, the people we meet and their stories rather passing journal articles. Surgical societies need to improve their engagement of young people and the public via social media. Outreach can begin as early as college and secondary school; this makes for a much more rewarding experience for the mentors also. Encouraging advocation of surgery could be included in the CST application proforma for example. Not be a glorification of the profession per se but an underlining that merit should be the deciding factor on pursuing surgery, not gender.

**“The life so short, the craft so long to learn.”** *- Hippocrates*

There are ten recognized specialties (7) with rigid programs. These can be moulded in a way that does not lower the standard but aims to retain the best and most skilled candidates (8). Considerations could be given to an increased range of shorter run-through specialized training. The societies have an obligation to represent the *entirety* of the profession. If current projections continue the proportion of women entering the medical field, ergo the surgical field will increase. This is creating a bottle neck. It is becoming apparent the current training streams need modifying to retain the best candidates. There is no reason why this could not be piloted in localities to see what effect this has on performance outcomes. Equally this may benefit those surgeons at the extremes of age who may wish to continue mentoring and teaching in a part time fashion.

Coming back to the military as an example it has a Reserves-Auxillary arm, these are individuals who serve part-time where training is no less vigorous and the standards are the same as their regular counterparts – its development has led to an agile adaptable workforce. Less-Than-Full-time-Training in surgical specialties are available but tend to be poorly advertised and vary across surgical specialties. A part-time allied workforce or job-share would greatly increase the capability of a surgical team. It would lessen the burdens of existing surgeons, male or female who must endure grueling work shifts to complete their training. It is the responsibility of societies to examine this objectively, step outside of their profession and see how this has been useful in *other* equally demanding professions.

I am a graduate-entry Pharmacist now a medical student, the Royal-Pharmaceutical-Society has a mentorship/mentee program with a tailored application process allowing applicants to ‘cherry pick’ mentors online, this would be an effective way to connect female surgeons with their aspiring counterparts. In the same vein, societies should incentivize surgeons in becoming shoulder-to-shoulder mentors. The literature supports the importance of effective mentorship and representation to career success regardless of gender (3). The sharing of professional experiences and professional networks facilitates mentee development (3). Standardized Apps allowing surgeons to ‘advertise’ gaps in their timetable for teaching and shadowing in surgery could be created, increasing exposure to theatres removing the mystique. Not all medical schools offer entire body anatomy sessions, this is often a time for medical students to become comfortable with basic surgical skills, perhaps the societies need to arrange more direct to student teaching involving cadavers and access to instruments and understanding technological advancements. Quite often the courses arranged by the societies are limited and poorly advertised, this needs to be addressed.

Smoothing out the irregularities we are currently facing would bolster the UKs surgical-profession to be one enviable worldwide, one that is representative of both male and females and its stake holders – *our esteemed patients*.

**“It is not easy to be a pioneer — but oh, it is fascinating!**

**I would not trade one moment, even the worst moment, for all the riches in the world.”** *- Elizabeth Blackwell*

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