

Gender in the ICU

Diversity and Equality During COVID-19: The World Series, *F. Rubulotta, A. Artigas*

Male Sex - An Independent Risk Factor for Mortality in Very Old Intensive Care Patients With Respiratory Failure, *R. Bruno, B. Wernly, B. Guidet, H. Flaatten, A. Artigas, C. Jung*

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Introduction

Diversity is the condition of having many different elements. These may include people with different opinions, backgrounds (degrees and social experience), religious beliefs, political beliefs, sexual orientations, heritage, and life experience. The definition of diversity is broad and it is really difficult to outline in practical term what is diverse in a specific context. As a matter of fact, diversity might change based on the context and location. Diversity is very important in the clinical setting to support both patients and healthcare professionals. Diversity facilitates better communication (Laveist and Nura 2002), improves patient satisfaction with care (Walker et al. 2012), provides good practice in underserved areas, and care for minority, poor, and uninsured patients.

In academic settings, work produced by diverse research teams may be of higher quality and more impactful than that by less diverse teams (Valentine and Collins 2015; Cooper et al. 2003). Doctors and nurses from different origins and beliefs have diverse perspectives, better understanding of minorities, increased creativity and productivity which all together improves the clinical decision-making process (Walker et al. 2012; Valentine and Collins 2015; Cooper et al. 2003).

Despite longstanding efforts, diversifying

Working in the Pandemic and Preserving Diversity

The devastating impact of the COVID-19 pandemic on women and communities of colour and the need for diversity among healthcare workers and public health leaders.

the biomedical research workforce remains an elusive goal, and large sectors of the population remain underrepresented. Certain racial/ethnic groups are represented only minimally in biomedical research: of the nation's scientific research faculty positions, 4% are African American, 4% are Hispanic, 0.2% are Native American, and 0.1% are Hawaiian/Pacific Islander (nsf.gov/statistics/2015/nsf15311/tables/pdf/tab9-30.pdf). There has been little increase in representation of these groups over the last decades, despite them collectively being the most rapidly growing portion of the population, predicted collectively to comprise the majority of the population of the U.S. by 2050.

A number of factors have been shown to contribute to the lack of diversity in science, technology, engineering, and mathematics (STEM) careers in general and in biomedical research. In particular among them are limited infrastructure and research experiences (National Academy of Sciences, National Academy of Engineering, and Institute of Medicine 2011; McGee and Krulwich 2012).

The COVID-19 pandemic has negatively impacted this aspect, leading to even less diversity in the workplace (Wernly et al. 2020; Klein et al. 2020; Lokken et al. 2020; CoBaTriCE Collaboration 2009; CoBaTriCE Collaboration 2011; Lane-Fall et al. 2017; Rubulotta et al. 2020). ICU staff, with additional caring responsibilities, such as educating children and caring for the elderly or for sick or vulnerable relatives, suffered the most during these years. Since many women are already disadvantaged when it comes to career development and funding opportunities, COVID-19 challenges pose the question: will women and other disadvantaged groups be disproportionately,

affected by the pandemic?

The United Kingdom (U.K.) ethnic minority people make up only 14% of the U.K.'s population, but they account for 35% of all coronavirus patients admitted to the intensive care unit (ICU). The U.K. government has commenced an inquiry to assess the triggers behind this disproportionate impact of coronavirus on minorities. Similarly, Black Lives Matter (BLM) has raised several concerns regarding the care and outcomes of COVID-19 patients in the U.S. (Wernly et al. 2020; Klein et al. 2020). The most obvious reason for a potential difference in the mortality rate is the gender and ethnicity related risk (Klein et al. 2020; Lokken et al. 2020).

Why Should We Preserve Diversity?

Patient-centred communication is key for rating the quality of care according to a recent survey including 252 adults (142 African-American patients and 110 white patients) receiving care from 31 physicians (Cooper et al. 2003). African-American patients who visit physicians of the same race rate their medical visits as more satisfying and participatory compared to those who see physicians of other races. Increasing ethnic diversity among physicians may be the most direct strategy to improve health care experiences for patients of ethnic minority groups (Cooper et al. 2003).

The National Health System (NHS) in the U.K. has published a report in 2018 suggesting that diversity is the new prescription for the NHS (Fanshawe 2018). This volume "is designed to open up a new approach to diversity that makes it central to an NHS trust because it delivers a dividend to patients and staff – in terms of health, and clinical and personal success – in line with the NHS Constitution: the

NHS “is there to improve our health and wellbeing, supporting us to keep mentally and physically well, to get better when we are ill and, when we cannot fully recover, to stay as well as we can to the end of our lives” (Fanshawe 2018).

Diversity in the ICU gives a different perspective, better understanding, increased creativity, productivity and this translates into better patient care. Administrators, critical care societies and individuals should work toward promoting and facilitating diversity. This is even more needed following the COVID-19 challenges. According to nursing literature, being exposed to cultural diversity including living in multicultural countries, speaking a second language and visiting other countries may influence the development of key competencies and soft skills. Therefore, programmes which facilitate multicultural clinical practice are strongly recommended. Soft skills generated by working in a multicultural environment are required also for doctors. Traditional medical education has been criticised for its failure to ensure that all graduates are adequately prepared for independent work at the bedside (CoBaTriCE Collaboration 2009). Learning and assessing soft skills is challenging. However major effort has been made to address human factor variables, enhance communication/collaboration in clinical practice through improvements in leadership, management, situational awareness and decision-making. Communication, professionalism, as well as negotiation and team working are all needed skills (CoBaTriCE Collaboration 2009; CoBaTriCE Collaboration 2011). Finally, reflective learning and patient or family-oriented feedback are becoming crucial in medical education and these are particularly important in a stressful environment such as the ICU.

Since 2020, ICU physicians are increasingly faced with providing care to a multicultural society complicated by the COVID-19 pandemic. Ensuring safe and quality healthcare for all patients requires physicians to understand how each patient’s sociocultural background affects his or her health beliefs and behaviour. In the light of the pandemic, physicians and healthcare systems will need to respond to factors that put racial and ethnic minority groups

at a greater risk of getting sick and dying. The conditions where people work and live affect underlying health conditions and also make it more difficult to access needed medical care and tests. This can be complicated by literacy and language barriers along with socioeconomic barriers, such as lack of insurance, lack of access to transportation, and even immigration status. Dr Denis Nash, an epidemiologist and the executive director of the City University of New York Institute for Implementation Science in Population Health (ISPH) said “we live in a country where your wealth and your socioeconomic status is a big determinant for how healthy you are, how long you will live and whether you live with a higher burden of disease while you’re alive”.

published data comparing annual trends in the representation of women and racial/ethnic groups across critical care fellowship types show underrepresentation of women and racial/ethnic minorities in critical care programmes

The BMA recommended junior doctors to campaign for better work-life balance (Rubulotta et al. 2020). This was before the pandemic and it has created concerns for starting residency in jobs requiring long shifts such as intensive care medicine. In particular, published data comparing annual trends in the representation of women and racial/ethnic groups across critical care fellowship types between 2004 and 2014 show underrepresentation of women and racial/ethnic minorities in critical care programmes (Lane-Fall et al. 2017). There are concerns about reduced income for universities and decreased number of women interested in critical care medicine as a discipline.

Experience shows that when resources are limited, powerful groups are likely to strengthen their position, which could increase bias. There is a high risk that research

and development in the private sector will be severely constrained. Data from several countries have shown that women are underrepresented in the field of intensive care medicine (Rubulotta et al. 2020). The reasons for the persistent gender imbalance in critical care medicine have been studied extensively over recent years (Vincent et al. 2021). In a survey of 283 American anaesthesiologists who were asked to make a collaborative decision, Helzer and colleagues found that when treatment advice was delivered by an inexperienced physician, participants reported relying significantly more on the advice of a man versus a woman. Of interest, although participants’ reliance on advice from a woman physician was a function of her experience, reliance on advice from a man physician was not (Helzer et al. 2020).

More importantly, these biases are reinforced through repetitive exposure to stereotypical images seen in social and work groups and in the media, and by the frequent underrepresentation of women speakers at international meetings and in leadership positions. Diversity is crucial to improve these aspects and enhance better team working and problem solving. Parsons Leigh and colleagues described institutional (lack of flexibility and limited job prospects) and interpersonal (bias against women) factors as key drivers of the gender gap in critical care medicine (Leigh et al. 2019). Organisations can promote gender equity and enhance inclusion by developing effective, appropriate and sustainable gender mainstreaming strategies that can be implemented, monitored, compared and updated as required. The diversity report in the U.K. has shown that at the top of British businesses, of the 297 CEOs CFOs and Chairs of the FTSE 100 companies, there are, at the time of writing, more men called John, David and Andrew than women or minorities (Fanshawe 2018). In the House of Commons on 28th October 2015, the Shadow Business Secretary quoted the latest annual survey of 10,000 top business leaders by executive recruiter Green Park: “it shows that the number of visible ethnic minority CEOs is falling, and the number of all-white Boards is increasing, at a time when 14% of our population is from a black

or minority ethnic background” (Fanshawe 2018). Institutional changes should be broad and include different fields of science, research, economy and so on.

How Should We Preserve Diversity?

Employers need to change their approach to recruitment and promotion. To achieve greater diversity leaders have to recognise that people make assessments driven by preferences. Awareness does not change behaviour because the only way to change it is to design the processes differently. In the words of the most persuasive researcher on the subject, Professor Iris Bohnet of Harvard University, Co-Chair of the Behavioural Insights Group and Professor of Public Policy at the Kennedy School of Government, “we need to create situations where our biased minds can make unbiased choices. If we want to appoint the best person for the job, we need to design processes where we can eliminate as much noise from our own biases and preferences as possible so we really can appoint the best” (Fanshawe 2018). Iris Bohnet’s latest book, *What Works – Gender Equality by Design*, starts with a famous example. In the 1970s, only 5% of musicians in U.S. orchestras were women and today they are 35%. To achieve this result, they put a curtain between the auditioning players and the people who were listening. That way those choosing could just listen to how the candidates played. When they then selected the best players, they were not all, as before, white and male, but much more mixed (Fanshawe 2018).

We all have preferences. Our intentions may not be to exclude, but the data tell us that this is exactly what is happening. We need to face up to it and make appropriate changes (Fanshawe 2018). Future research should focus on identifying gaps and best strategies to improve diversity in the ICU. We should identify psychological and social factors that mitigate individual and institutional barriers to workforce diversity (Rubulotta et al. 2020; Fanshawe 2018; Vincent et al. 2021). Trusts should develop a sustainable strategy to effectively disseminate and create more diversity within the nationwide scientific workforce.

There is no possibility of ignoring the resources and energy that employing women and minorities could bring to the workforce structure

There is robust evidence suggesting in numerous industries that diversity is fundamental for maintaining a healthy and productive organisation. Women in particular have proven numerous times to bring innovation, equilibrium and balance in the working and production side. According to Prof Goffee and Jones from Harvard Business school “the organization of your dreams... it’s a company where individual differences are nurtured; information is not

suppressed or spun; the company adds value to employees, rather than merely extracting it from them; the organization stands for something meaningful; the work itself is intrinsically rewarding; and there are no stupid rules”. This is even more crucial after this pandemic. The workforce is limited, and emotionally and physically exhausted. There is no possibility of ignoring the resources and energy that employing women and minorities could bring to the workforce structure.

Conclusion

Diversity and code of conduct policies have been adopted by several critical care societies and the World Federation of Societies of Intensive and Critical Care Medicine. Widespread use of such policies will help eliminate inequity and enhance inclusion as well as develop needed soft skills. Acknowledging the existence of implicit and explicit biases is an essential first step. Several strategies need to be put in place by leaders, societies, industries and employers in general. The pandemic’s devastating impact on communities of colour clarifies the need for diversity among healthcare workers and public health leaders. Intelligent measures such as having a diverse workforce and a commitment to progress in the quality of care, innovation and engagement of staff are vital.

Conflict of Interest

None. ■

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