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Gender in the ICU

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Diversity and Equality During COVID-19: The World Series

Looking at gender, bias and equality through the lens of the COVID-19 crisis and its potential for broad and lasting effects and addressing how this unprecedented situation can be a chance for interaction, learning and the development of best practices, such as developing work structures that could be continued in our post-pandemic future.

Epidemiological findings, outcome data, and socio-economical global concerns, among other factors, compel us to write this world series on diversity and equality during the COVID-19 pandemic. The number of male patients infected with and dying from COVID-19 during the first wave was perceived to be higher compared to women. Yet this data is not universally confirmed and there may have been further differences during the first and the second wave of the pandemic (Wernly et al. 2020; Jung et al. 2021; Ibarz et al. 2020). As a matter of fact, a study of patients >70 years of age admitted during the first wave of COVID-19 to 138 ICUs from 28 countries included 1346 patients (28% females). Mean age was 75 years and overall survival was 59% for women. Frailty was present in 41% of all patients and this was associated with a higher mortality. Frailty in females was present in 39% (Wernly et al. 2020; Jung et al. 2021; Ibarz et al. 2020). In the very old critically ill patient group (the "VIP") sex study (no COVID-19 and >80 years admitted to ICU) male sex was associated with adverse 30-day mortality but not with ICU mortality (Jung et al. 2021; Ibarz et al. 2020).

Authors of this world series sought answers from the VIP collaboration to understand the impact of frailty in the ICU population short-term outcome. The statement that men suffered a worse outcome then women might be simply a matter of perception. It should therefore not be relied upon as fact when deciding on resource allocation, triage, life expectancy, or prognostication. This issue will address the contradicting data and the preliminary evidence to highlight whether COVID-19 affected genders differently when it comes to infection risks and infection outcomes.

Data reported in the United Kingdom (U.K.) showed that while black and minority ethnic people make up only 14% of the U.K.'s population, 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 US (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. 2021).

Similarly, there are several concerns related to pregnancy and vertical transmission to neonates. Among these concerns are the fact that there is a lacuna when it comes to the effect of medications given to treat COVID -19 during pregnancy. This lack of adequate clinical data extends to the use of vaccines during pregnancy or among those planning for pregnancy. As a matter of fact, vaccination has not been advised for pregnant women or for women planning to get pregnant within two months of vaccination. Of course, this lack of definitive knowledge has a major impact on the life of young women or young couples.

There have been arguments put forward that the COVID-19 economical global crisis has affected women and men differently. This hypothesis has been validated by the fact that more women were made redundant compared to men in 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 in general.

The world faces an economic crisis that is likely to impact research funding opportunities for a long time. For one example, there is already concern about reduced income for universities. For another, there is a high risk that research and development in the private sector will be severely constrained. Since many women are already disadvantaged when it comes to career development and funding opportunities, this poses the question: will women and other disadvantaged groups be disproportionately affected by these cuts? Experience shows that when resources are limited, powerful groups are likely to strengthen their position, which

could increase bias. Indeed, a participant described how during a recent grant application process the applicant asked if the submission deadline could be extended due to increased childcare responsibilities. The grant administrators refused to allow the extension arguing that the proposal did not require travel or lab access and would therefore not be affected by the pandemic. Other funding bodies have been more understanding of the wider impacts of COVID-19 and have extended submission deadlines for all applicants.

This special issue will therefore look at gender, bias and equality through the lens of the COVID-19 crisis and its potential for broad and lasting effects. How is the pandemic's peak, sickness, quarantine and economic shutdowns affecting our perceptions of equality? How are they challenging our preconceptions of what are reasonable expectations for frontline workers - especially those with caring responsibilities?

The Gender in the ICU issue will address how this unprecedented situation can be a chance for interaction, learning and the development of best practices, such as developing work structures that could be continued in our post-pandemic future.

> **"the COVID-19 pandemic provides us with a unique, even if unwelcome, opportunity to press the "reset button", which will either reduce or exacerbate the inequality amongst disadvantaged groups"**

Authors have noted significant issues for the future of intensive care medicine (ICM) due to the drop in the number of medical students selecting ICM or any frontline discipline for their future career. This has recently been discussed among international women in intensive and critical care foundation (iWIN) and results are available following the link www.iwinideal.com.

History teaches that pandemics are a time to regroup and reflect. The COVID-19 pandemic provides us with a unique, even if unwelcome, opportunity to press the "reset button", which will either reduce or exacerbate the inequality amongst disadvantaged groups, in particular for low-income individuals.

Once the pandemic is over, what will be the new normal? Adaptations developed during the current pandemic hold the potential to help overcome or reinforce disadvantages that are rooted in bias. Ways to address all these issues are illustrated in the articles featured in this issue.

Conflict of Interest

None. ■

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