



## Inequities in access to ICU care



ICU care is an expensive healthcare resource as it offers specialised physical space, advanced equipment and the expertise of well-trained healthcare professionals. Due to the type of services offered by an ICU, the department has to operate on limited resources only dedicated for patients who require life-sustaining interventions.

Over the years, various guidelines have been proposed to determine which patients should be admitted to the ICU. However, these guidelines are subject to interpretation and may often be subject to individual decisions and bias. This results in inequities in access to ICU care.

Different studies have shown different reasons for this inequity. According to a multicenter, cohort study from Europe, it is actually age and not gender that is an important predictor for refusal of admission to ICU while another study conducted in Ontario, Canada reports that females are less likely to be admitted in the ICU and are also less likely to receive ICU interventions compared to males. Yet another study using administrative data of patients reports that men are more likely to receive ICU admission as well as invasive mechanical ventilation compared to females who are more likely to receive non-invasive ventilation.

Females are also less likely to receive early, goal-directed treatment, reports another study. Women are also associated with the decision to forego life-sustaining therapies after being admitted to the ICU. Another study has reported that black adults are less likely to be admitted to a coronary care unit (CCU) with fewer CCU days even if admitted compared to white men. Overall, it seems that race, culture and ethnicity are all possible reasons for bias in access to ICU care.

In order to ensure equitable access to ICU care, it is important to have valid methods to measure this. The ICU admission process is generally quite complex since patients usually come from the ward, operating room or emergency departments. Patients also require a referral from the physician to the intensivist who then assesses whether they meet the ICU admission criteria. In short, multiple factors can affect the decision to admit a patient to the ICU but clearly, access is inequitable and this should be taken seriously. Population-based studies can provide more insight into why these inequities exist. But it is important that when these results are compiled and when rates are examined and compared, the appropriate denominators are selected.

According to Garland and coworkers, the denominator should be the number of eligible patients for ICU care. They propose this for two reasons:

- The general population is not the appropriate denominator since there is no uniform disposition

to critical illness

- The hospital-based denominator is not appropriate either since the biases that lead to inequitable access can be expressed at any point in the illness trajectory.

That is why they explored the use of population-based palliative care deaths as a surrogate for critical illness and ICU admissions. They found that with this approach, the bias for ICU admission due to sex disappeared but lower ICU admission for people in lower income strata became obvious.

Their approach indicates that population health studies are dependent on the accuracy of the coding and the algorithms used for analysis. That is why any studies that investigate access to ICU should consider that critical care is a system within a large hospital and healthcare system. There are many social, environmental and population factors that could affect this access. While gender appears to be one such factor, it is not the only one. More insight can be gained by using the right denominators and the right tools to measure and understand inequities in access to ICU care.

Source: [Critical Care Forum](#)

Image Credit: iStock

Published on : Wed, 7 Nov 2018