

## Sex Differences in Treatment of ICU Patients



Sex imbalance in the ICU has been consistently reported. Worldwide, fewer women are admitted to the ICU than men. Several studies have reported systematic differences in the treatment men and women receive in ICUs. Studies from Europe, North America, and Asia all show women are less likely to receive invasive mechanical ventilation than men. Studies also show that women have lower mean Therapeutic Intervention Scoring System scores than men. However, some studies also report that men and women are equally likely to receive mechanical ventilation. Hence, the data remains somewhat inconsistent.

There is no doubt that treatment in the ICU should be based on the patient's physiologic requirements and preferences rather than their sex. Therefore, it is important to determine whether sex differences exist in the treatment of ICU patients, and if they do, it is important to analyse whether these treatment differences are attributed to illness severity or sex.

A study was conducted to evaluate sex differences in the treatment of patients in the ICU. Researchers screened publications to identify studies of adult ICU patients that examined the association between sex and ICU treatment. In particular, they studied the differences in mechanical ventilation, renal replacement therapy and ICU length of stay. The reviewers screened 4,098 publications and identified 21 studies that fit their research goal.

The review findings show that women in the ICU were less likely to receive invasive mechanical ventilation or renal replacement therapy compared to men. In addition, ICU length of stay was shorter in women than in men. However, no significant sex difference was observed in the duration of mechanical ventilation or hospital length of stay.

These findings suggest that women are less likely to receive mechanical ventilation or renal replacement therapy than men and have shorter ICU length of stay. There seems to be substantial heterogeneity and risk of bias in the literature. There could be several plausible reasons for these differences. First, it could be that clinicians are responding to systemic differences in illness severity. While the findings of this review make this seem unlikely, it could still be a possibility. Second, clinicians tend to refer to standardised reference parameters rather than sex-adjusted ones, which could promote a tendency to intervene more frequently in men. For example, men tend to have higher serum urea levels than women. This could be why they are prescribed renal replacement therapy more often. Third, there is an implicit bias due to which clinicians unconsciously provide more intensive treatment for men than women in the ICU. Several studies report implicit biases about gender and other variables among healthcare professions. These biases can impact clinical care.

Whatever the reasons for the sex differences in the treatment of men and women in the ICU, this is an important area for future research. It is important to determine if sex differences in treatment in the ICU lead to different outcomes for men and women and, if this is the case, what strategies could be used to minimise this bias and ensure equitable treatment in the ICU.

Source: [Critical Care Medicine](#)

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