



## Perspective

## Female representation in intensive care medicine: Challenges and perspectives from China<sup>☆</sup>



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## ARTICLE INFO

**Keywords:**  
Gender gap  
Female  
Critical care

## ABSTRACT

The gender gap in the practice of intensive care medicine has increasingly been recognized as a problem in recent years. Despite limited information, the available data suggest that representation of women in the physician workforce, academic positions, and leadership roles in intensive care is inadequate globally. In this article, we describe the situation of female intensive care unit (ICU) physicians from the perspective of Chinese intensivists. The proportion of female ICU physicians in China has been increasing in recent years. The biggest challenges faced by female ICU physicians include balance of work and life, difficulties in career planning, and lack of academic influence. More attention and policy support should be provided to help them play a better role in intensive care medicine.

## Background

Gender gap in the practice of intensive care medicine has increasingly been recognized as a problem in recent years. Despite limited information, the available data suggest that representation of women in the physician workforce, academic positions, and leadership roles in intensive care is inadequate globally, and more so in developed countries.<sup>[1]</sup> A gender imbalance can bear a negative impact on working atmosphere, efficiency, mental health of employees, and so on.<sup>[2]</sup> Additionally, it can act as a serious impediment in the way of career advancement for women.<sup>[3]</sup> Hence, many efforts have been made to improve the current situation.<sup>[4,5]</sup> In China, the number of female ICU physicians has been increasing in recent years. The biggest challenges female ICU physicians face include maintaining a work–life balance, impediments in career planning, and lack of academic influence.

## Increasing of Female ICU Physicians in China

The idea that men are superior to women has been deeply ingrained in Chinese culture since ancient times. Traditionally, it has been considered natural for men to go out to work and women to stay at home with the children. Gender equality was first put forward and written into the constitution in 1954. However, it was not until 2012 that it was issued as a basic state policy of China. Since then, the situation has significantly improved, as men and women enjoy equal rights and bear equal obligations in all spheres of life, be it politics, economy, culture, society, or family.<sup>[6]</sup> A national policy fundamentally provides women more opportunities to advance in their careers, including the field of medicine. As a result, increasingly more women are attending medical school by clearing the national college entrance examination. In recent years, it has been reported that the female-to-male ratio has increased to 2:1 in some Chinese

<sup>☆</sup> Given their role as Associate Editor and Editorial Board Members, Prof. Yi Yang, Prof. Jordi Rello and Prof. Yan Kang had no involvement in the peer-review of this article and have no access to information regarding its peer-review. Prof. Nadia Aissaoui took the responsibility for peer-review progress. Prof. Jean-Louis Teboul who is the co-editor-in-chief made the final decision.

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<https://doi.org/10.1016/j.jointm.2021.12.002>

Received 25 September 2021; Received in revised form 13 December 2021; Accepted 14 December 2021. Managing Editor: Jingling Bao

Available online 7 January 2022

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medical schools. Similar trends can be seen in intensive care medicine as well. A questionnaire from China Medical Women's Association (unpublished data) seeking information about the representation of women was circulated in 74 hospitals across the country. The responses obtained indicate that there has been a significant increase in the number of female ICU physicians. As the total number of ICU physicians increases year by year in China,<sup>[7]</sup> the proportion of female ICU physicians has increased in 55 hospitals (74.3%), been stable in 14 hospitals (18.9%), and decreased in 2 hospitals (2.7%); further, for 3 hospitals (4.1%) in this sample, information on the change in the proportion of female representation remains unknown. Data from the questionnaire reveal that female representation in these hospitals is 50.06% (838/1674).

### Work–Life Balance Challenges

The choice to become a professional ICU physician involves long-term learning, intensive training, and high-intensity work. If someone aspires for a great academic status or leadership, efforts should be put into publishing papers, applying for funding, academic communications, and other such scholarly ventures.<sup>[8]</sup> Striking a balance between work and family is the most challenging aspect in the life of every Chinese ICU physician, especially women.<sup>[9]</sup> An entrenched view that taking care of children and doing housework is primarily the women's but not men's responsibility still widely exists even in contemporary Chinese society. For example, West China Hospital, which serves as the largest teaching hospital and ICU training base in Sichuan, requires that an ICU physician should have completed both, a doctoral degree (which takes approximately 8–11 years) as well as clinical training (which includes 3 years of residency and 2 years of fellowship) after graduating from medical college. During the training period, it is common for ICU trainees to work for 60–70 h per week, far exceeding the legal work hours (40 h per week) in China. Furthermore, it is mandatory for everyone to complete a 1-year chief residency, which entails a 24-h stay in the ICU ward for 6 days with only 1 day off per week. Excellent and talented women often start their official career as an ICU physician after the age of 30. Owing to career obligations, it is difficult for these women to choose the right time for marriage and pregnancy. Hence, they are often labeled as “leftover women” and “Double Income, No Kids (DINK) family.” It is not an uncommon phenomenon; in the ICU mentioned above, they have 21 female doctors between the ages of 30 and 50. Among them, 6 are single (29%), 8 have no children (38%), 12 have 1 child (57%), and only 1 has 2 children (5%). Although these data may not be representative of the whole intensive care medicine in China, the emergent trends could be used to speculate that a similar situation exists in other institutions. The seventh national census showed that the total fertility rate in China has decreased from 6 in 1953 to 1.3 per woman in child-bearing age in 2020.<sup>[6,10]</sup> Long working hours and high labor intensity work involved in a profession such as intensive care medicine renders taking care of a family and pursuing a career an irreconcilable conflict for women. A one-child policy and the familial arrangements of seeking help from grandparents to take care of children somewhat reduces the share of responsibilities on women.<sup>[11]</sup>

### Career Planning for Female ICU Physicians

Career planning is a major challenge for women who desire to become mothers.<sup>[12]</sup> As stated above, in Chinese society, women play a more important role than men in bearing and educating children, which is time consuming and interrupts their career progression. Additionally, the mandatory retirement age is 55 for women and 60 for men in China. In conjunction, these two factors make women's careers shorter in duration than those of men. It is also difficult to plan for this relatively short professional time. Usually, 40 is the prime age for an ICU physician. If women can devote themselves to work and excel between their 30 s and 40 s, the possibility of being an academic leader or director exists. However, the golden period for career development according to this estimation overlaps with the time when women must attend to crucial responsibilities toward their children. When the child grows up and the mother enters her 40 s, her responsibilities and commitments to her family life are relatively less. At this age, women may want to pursue their career enthusiastically, but there are fewer opportunities for career advancement. It is likely that at this juncture, important leadership positions may already be occupied by men of the same age, and good learning opportunities may be provided to younger doctors. The choice between career and family is riddled with conflict, and women should ponder upon it at the beginning of their ICU career. As it is considerably difficult for most female ICU physicians to reach management positions or get senior professional titles, they find themselves working at the clinical front-line. The intensity of work involved in front-line duties can also become increasingly challenging with age, especially during stressful night shifts.<sup>[13]</sup>

### Academic Influence of Female ICU Physicians

Circumstances and societal expectations make it difficult for a woman to carve an outstanding career for herself. In addition, some biased perceptions in a male-dominated society attempt to instill a general belief that women are overly emotional, not natural leaders, and unsuitable for handling emergent situations.<sup>[4]</sup> Therefore, the proportion of women in high positions, such as academic leadership and department directors, remains relatively low. For example, the proportion of female committee members in the Chinese Society of Critical Care Medicine (CSCCM) is about a quarter, and there has never been a female chairman to date. In the Sichuan CCM committee, there were 68 ICU directors, and only 21 were female, accounting for 31% of the total number of directors. Based on the challenges faced by female physicians, the China Medical Women's Association, a national first-level association supervised by the Ministry of Health, was established in 1995, and a branch of critical care medicine came into effect in August 2020. Professor Yi Yang, an outstanding female ICU physician working at Zhongda Hospital, Southeast University, was selected as the chairman of the CCM branch. The main purpose of the association was to provide favorable conditions for female scientists and leaders and improve the academic status of Chinese female doctors through government protection policies and increased opportunities for engagement in various academic activities. Thus far, two annual meetings have been conducted by women's CCM association. Outstanding female ICU representatives from across the

country gathered and exchanged their experiences and the challenges pertaining to their career. The association attempted to provide support and a platform to women working as ICU physicians.

### Supporting Women Working in ICUs

It is undeniable that women play a key role in intensive care medicine. In the fight against COVID-19 in Wuhan, two-thirds of the healthcare workers were women. The different roles that society assigns to men and women make women confront greater challenges in terms of trying to balance taking care of the family while dealing with intensive work.<sup>[14]</sup> Many institutes have realized the challenges faced by women working as ICU physicians. Accordingly, they have instated certain measures such as granting reasonable maternity leave, reducing night shifts for women aged >45 years, extending the age for youth project applications, and striving for equal gender representation in committees and speakers at conferences. We believe that with adequate support and measures in place, women can excel in their careers as ICU physicians and find a harmony between professional and family lives.

### Conclusions

Female ICU physicians are an indispensable force in China in the development of critical care medicine. Women in intensive care medicine face great challenges because of both their special role in family and high-intensity work. More data and reasonable policy are needed to help them play a better role in the future.

### Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

### Conflicts of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### Supplementary Materials

Supplementary material associated with this article can be found, in the online version, at doi:[10.1016/j.jointm.2021.12.002](https://doi.org/10.1016/j.jointm.2021.12.002).

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