

SCIENTIFIC LETTER



Parenting, pregnancy and work–family balance in intensive care medicine: an ESICM survey and a call for action

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Dear Editor

The Intensive Care Unit (ICU) is a demanding environment, characterized by unpredictable shifts and heavy cognitive and emotional loads. Burnout [1] and moral distress [2] are well described in ICU, yet their interaction with family life has been less frequently explored. Previous studies demonstrate a significant contribution of work–family conflicts to burnout among other medical specialties [3], but limited information is available among ICU workers. To fill this gap, the ESICM NEXT Committee, the N&AHP Committee and Diversity & Inclusion Group launched a survey to explore and describe work–family balance and support to parenthood and pregnancy among ICU professionals.

Survey population

Details on the development, distribution and analysis are reported in the Online Supplement. Between March and September 2025, 420 ICU professionals from 32 countries responded to the online questionnaire. The majority were from Europe (93%), with Italy (57%), The Netherlands (16%), and the United Kingdom (6%) most represented. Respondents were predominantly females (62%), with a mean age of 40 ± 9 years and a mean ICU experience of 11 ± 9 years. Consultants (40%) and

senior residents (24%) formed the largest professional groups (Table S1–S3 and Fig. S1). Sixty-seven percent of respondents were parents (median two children). Parenthood was characterized by older age, greater ICU experience, more stable contracts, and senior roles (Table S3). Parents reported working fewer hours per week, fewer nights and weekends, and a greater proportion of part-time work (Table S4).

Impact of ICU work on family development choices

Sixty percent of nonparents reported that working in ICU had a strong/very strong impact on their decision to become parents. Similarly, 46% of professionals with children declared that ICU work had a strongly/very strongly impact on their decision to have more children, with high rates in women than men (50% vs. 40% of men) and junior residents (70%).

Support for childcare and parenthood

The perceived level of childcare support from the employer was low (median 3 [IQR 1–5] on a 10-point scale) and, when present, included mainly flexibility (27%), facilitated rotations (20%), and reduced working hours (17%). However, 43% of respondents reported receiving no support, and 60% disagreed that their employer adequately supported parenthood. Parental leave showed possible gender differences, with 88% of mothers versus 48% of fathers taking leave (Table S5).

Support during pregnancy while working in the ICU

Among 192 respondents completing the pregnancy section, 61% continued working in the ICU during

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pregnancy. While most were aware of national guidelines on work during pregnancy (76%), only 19% received guidance specific to intensive care, and 43% underwent institutional health and safety assessments (Table S6, Figure S2). Participants reported a low level of perceived employer support during pregnancy, with a median score of 4 [IQR 2–6] on a 10-point scale. Postnatal measures such as adjusted shifts, breastfeeding facilities, or structured return-to-work programs were inconsistently provided (Table S7).

Among partners of pregnant ICU workers, 53% of respondents were able to take time off work to attend antenatal appointments, while 45% felt their workplace was supportive of their role as expectant parents. Seventy-two percent of expectant parents reported that working hours interfered with their ability to support their partner during pregnancy, and 20% received clear information on maternity/paternity leave options.

The conflict between work and family

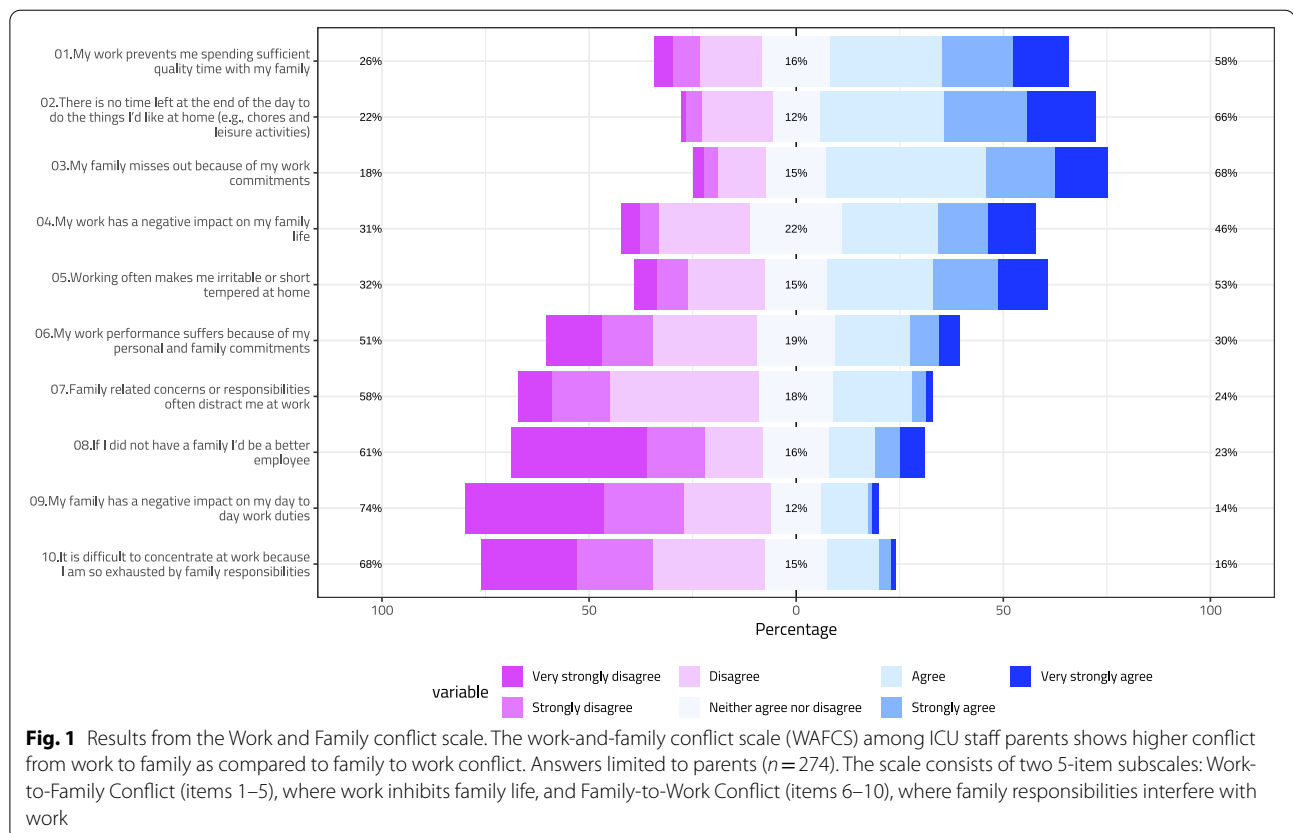
ICU professionals reported overall higher scores for work-to-family (23[IQR 20–27]) as compared to family-to-work conflict (15[IQR 10–19], Fig. 1) [4] with women reporting higher levels of work-to-family conflict (figure S5). Nearly half (46%) of respondents agreed/strongly

agreed that parenthood limited their career opportunities, with higher ratings from mothers (7[IQR 4–8] vs. 5[IQR 2–8] on a 10-point scale).

Impact and limitations

In this survey, we found that working in the ICU has an impact on parenthood decisions and experiences across different stages of family life, from pregnancy planning to childcare, and from both maternal and paternal perspectives. Despite increasing attention to equity and work-life balance, support for pregnancy and parenthood in the ICU remains limited, inconsistent, and often unclear. Many professionals continued working in high-risk environments during pregnancy with minimal ICU-specific guidance or structured occupational protection.

ICU work might affect the decision to have children, especially among women and young professionals. This data confirms the negative consequences of highly demanding environments on childbearing, similar to a recent survey of anesthesiologists and intensivists [5]. Parenthood was commonly perceived as an obstacle to work opportunities, reflecting structural barriers that remain poorly investigated. This survey addresses a relevant and underexplored issue in critical care, including perspectives across different stages of parenthood, but



has significant limitations, including self-reported data, potential selection bias, and restricted generalizability. Moreover, since the survey link was openly accessible, a precise denominator of eligible ICU professionals could not be defined, and a response rate could not be reliably calculated. Finally, the geographic distribution of responses and diversity of childcare policies (Table S9), the gender imbalance, and the voluntary self-selection design limit representativeness and preclude generalization to ICU professionals at large. Accordingly, the findings should be interpreted as descriptive perceptions among respondents rather than population-level estimates, and subgroup comparisons as exploratory only. Nevertheless, these results support clearer and shared institutional policies, working conditions, and proactive organizational support to reduce the possibilities of professional penalties associated with pregnancy and parenthood.

The way forward

Combining childcare responsibilities with ICU workload was frequently reported as challenging among respondents. These findings suggest that pregnancy and parenthood in intensive care settings deserve further structured investigation, particularly regarding organizational policies and workplace support. Future research using representative designs is needed to better understand the extent of these issues and to provide evidence-based institutional strategies.

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1007/s00134-026-08365-x>.

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Data availability

The datasets generated during the current study are available from the corresponding author on reasonable request.

Declaration

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.

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References

1. Azoulay É, Myatra SN, Heras La Calle G et al (2025) Positive communication for decreasing burnout in intensive-care-unit staff: a cluster-randomized trial. *Intensive Care Med* 51:2031–2041. <https://doi.org/10.1007/s00134-025-08134-2>
2. Rodriguez-Ruiz E, Campelo-Izquierdo M, Veiras PB et al (2022) Moral distress among healthcare professionals working in intensive care units in Spain. *Med Intensiva (Engl Ed)* 46:383–391. <https://doi.org/10.1016/j.medine.2021.06.005>
3. Dyrbye LN, Shanafelt TD, Balch CM et al (2011) Relationship Between Work-Home Conflicts and Burnout Among American Surgeons: A Comparison by Sex. *Arch Surg* 146:211–217. <https://doi.org/10.1001/archsurg.2010.310>
4. Haslam D, Filus A, Morawska A et al (2015) The Work-Family Conflict Scale (WAFCS): development and initial validation of a self-report measure of work-family conflict for use with parents. *Child Psychiatry Hum Dev* 46:346–357. <https://doi.org/10.1007/s10578-014-0476-0>
5. Zdravkovic M, Kabon B, Dow O et al (2024) Working conditions during pregnancy: a survey of 3590 European anaesthesiologists and intensivists. *Br J Anaesth* 133:1062–1072. <https://doi.org/10.1016/j.bja.2024.08.002>