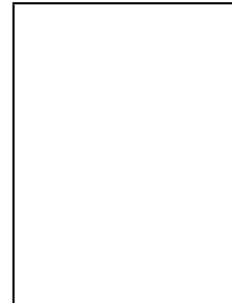


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Response to “Insights on Effectiveness of a cardiac rehabilitation program in women with heart failure”

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Response to “Insights on Effectiveness of a cardiac rehabilitation program in women with heart failure”

Resposto a “Perceções sobre a eficácia de um programa de reabilitação cardíaca em mulheres com insuficiência cardíaca”

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To the Editor,

We sincerely thank Aphale et al. for their interest in our study "*Effectiveness of a cardiac rehabilitation program in women with heart failure*" (Rev Port Cardiol. 2025;44:525-32).

We acknowledge that the female subgroup represented a smaller proportion of the total sample, however; all participants were consecutively enrolled and completed a standardized, supervised program, thereby enhancing internal validity. As stated, given the limited sample size, stratified subgroup analyses by sex lacked sufficient statistical power to draw definitive conclusions. Nonetheless, we agree that future studies should explore phenotype-specific exercise responses, particularly given the higher prevalence of heart failure (HF) with preserved ejection fraction among women.

Regarding the improvement in ventilatory efficiency observed exclusively in women, this finding may reflect sex-related physiological adaptations. However, the differences may also be linked to the small sample size. We highlighted this point in the discussion and agree that mechanistic exploration through larger, adequately powered cohorts would be valuable.

Considering the adherence rate, our center-based, multidisciplinary model may not fully reflect real-world barriers, particularly for women. The high adherence rate observed in our study may be related to close supervision and individualized program, both strategies are known to enhance adherence.¹ In addition, selection bias cannot be excluded, as only women referred by clinicians were included, underscoring the importance of clinician engagement in promoting participation in CR.

Finally, regarding the QoL assessment, the MLHFQ was chosen for its broad validation across studies.² Nevertheless, we recognize that additional patient-reported outcome measures could provide broader insights into psychosocial domains, particularly those relevant in women. Integrating such tools will strengthen future research.

We share Aphale et al.'s view that increasing female participation, stratifying outcomes by HF phenotype, and integrating gender-sensitive rehabilitation strategies are crucial to ensuring a more comprehensive rehabilitation response in women.

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Declaration of Competing Interest

None.

Declaration Of Generative AI

The author declare that AI-based language assistance was used solely for grammar refinement. All intellectual content, interpretation, and conclusion are the sole responsibility of the author.

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