

## Peer Review File

Article information: <https://dx.doi.org/10.21037/tau-24-234>

### Reviewer A

**General comment:** The authors reviewed the prevalence of ED and associated factors in men with HIV, exploring its correlation with symptoms of depression, anxiety and stress. The results highlight the imperative need for an integrated approach to clinical management, considering both medical and emotional aspects in men living with HIV.

**Reply to the general comment:** That is precisely what our study covered.

**Comment 1:** The review has several flaws suggesting that it has been written by AI. Several sentences are quoted inappropriately since their content does not fit with the text of the sentence citing the article. I suggest checking the manuscript for automatic AI writing.

**Reply 1:** We sincerely apologize for the existing flaws in the previous version of the manuscript. The writing was not generated by AI. However, we did use the Zotero software for reference management and after performing checks regarding the citations in the text and in the bibliography, some mistakes were detected and promptly corrected. We deeply regret that these mistakes occurred in the previous version, and we thank you for realizing that, so no errors would be made public.

**Changes in the text:** All the changes in the text are marked with the aid of the track-changes option. Consequently, the reviewer can detect the corrections performed in respect to comment 1. Particularly, the changes in the text are as follows: pages 2-3 (lines 8-28). Please note that a considerable number of corrections were made, including the addition of more citations as requested by the reviewer (please, see comment 3).

**Comment 2:** The title may be improved.

**Reply 2:** Once again, thanks very much for this input. After reading related literature and the style of papers published at Translational Andrology and Urology, we suggest that the new title could be “Erectile dysfunction in men with HIV: Prevalence and Associated Factors”.

**Changes in the text:** Page 1, lines 1-2.

**Comment 3:** Introduction. Please add a reference about the relation between sexuality and quality of life. Besides avoid quoting articles not in English language throughout the text (refs n 2, 5).

**Reply 3:** Thanks for this comment. We fully complied with it. We removed the references previously numbered as 2 and 5 (publications in Portuguese) and included the reference about the relation between sexuality and quality of life (e.g., reference number 1: Nolsøe AB, Durukan E, Jensen CFS, et al. Diagnosis of Male Sexual Dysfunction. In: Sarikaya S, Russo GI, Ralph D, Hrsg. Andrology and Sexual Medicine. Cham: Springer International Publishing; 2022: 19–28).

**Changes in the text:** Page 2, lines 5-8.

**Comment 4:** Introduction. When approaching the issue of male sexual dysfunction better references may be quoted: a. Wass, John A.H., and others, 'Management of Sexual Dysfunction', in John Wass, Wiebke Arlt, and Robert Semple (eds), Oxford Textbook of Endocrinology and Diabetes 3e, 3 edn (Oxford, 2022; online edn, Oxford Academic, 1 Jan. 2022), <https://doi.org/10.1093/med/9780198870197.003.0193>, accessed 8 July 2024.

**Reply 4:** Once again, we are extremely grateful for this comment. We fully complied with it. Moreover, this comment has a direct relationship with the comment given by the Reviewer B, who asked for further references regarding the prevalence of ED (please, see Reviewer B, Comment 1). Nonetheless, we are in a position to consider in good faith any further improvements that you may feel relevant to incorporating in the article.

**Changes in the text:** We made changes in the text (Page 2, lines 5-10; Page 3, lines 20-23), with new referencing numbers. We also included the suggested textbook and a few others, such as:

Nolsøe AB, Durukan E, Jensen CFS, et al. Diagnosis of Male Sexual Dysfunction. In: Sarikaya S, Russo GI, Ralph D, Hrsg. Andrology and Sexual Medicine. Cham: Springer International Publishing; 2022: 19–28

Rochira V, Carani C, Granata ARM. Management of Sexual Dysfunction. In: Wass J, Arlt W, Semple R, Hrsg. Oxford Textbook of Endocrinology and Diabetes 3e. Oxford University Press Oxford; 2022: 1605–1618.

Sarikaya S. Erectile Dysfunction: From Diagnosis to Treatment. In: Sarikaya S, Russo GI, Ralph D, Hrsg. Andrology and Sexual Medicine. Cham: Springer International Publishing; 2022: 29–39.

**Comment 5:** Did the authors fully know the content of studies quoted in references? 6 and 7 do not fit with the content of the sentence and do not refer to PLHIV. Please remove or change. The same for ref 19.

**Reply 5:** We are grateful for this careful analysis. Indeed, after checking each reference, we noted that some quotes were not appropriated. Consequently, unrelated literature has been removed, including references previously numbered as 6, 7 and 19.

**Changes in the text:** References previously numbered as 6, 7 and 19 were deleted from the main text and, if applicable, also from the reference section of the manuscript.

#### **Reviewer B**

**General comment:** This study provides valuable insights into the prevalence and factors associated with ED in men living with HIV. Adding some information would make it easier for the reader to understand.

**Reply to the general comment:** We are extremely grateful for the feedback on

our manuscript. Certainly, the comments and respective changes in the text described next have improved the overall clarity of the article. Albeit we did comply with all the changes, we would like to express that if there are still other issues that the reviewer considers relevant, please, do let us know.

**Comment 1:** A more detailed description of previous studies on the prevalence of EDs and associated factors in HIV-infected people would help to position this study better. For example, what do the 3,8,9,20-25 previous studies reveal? The addition of these statements will provide a better understanding of why this study is necessary and what new findings can be expected.

**Reply 2:** This comment is extremely constructive and has been fully considered. As such, the revised version now contains subheadings because the editorial office also requested a few modifications, including a better structuring of the article and overall revision of other requirements, such as statistical reporting (<https://tau.amegroups.org/pages/view/guidelines-for-authors#content-8>). Consequently, additions of the statements conveyed under this comment have been incorporated into the text, precisely under the heading “1.2 Rationale and Knowledge Gap”.

**Changes in the text:** Page 3, lines 15-30 and page 4, lines 2-12.

**Comment 2:** Use the full spelling (e.g. ART: antiretroviral therapy) when the term first appears.

**Reply 2:** We sincerely apologize for this. This has been corrected.

**Changes in the text:** Page 3, Lines 26-27.

**Comment 3:** Material and methods. Design and participants. Please summarize the demographic data and present it in a Table. This is very important information for this study.

**Reply 3:** We thank the reviewer for this comment. We have included a new Table (i.e., Table 1) accounting for this information.

**Changes in the text:** Pages 5 and 6, Lines 28-30 and 1-3, respectively.

**Comment 4:** Data collection procedures. The International Index of Erectile Function (IIEF-6) and the Depression, Anxiety, and Stress Scale (DASS-21) were used in this study, but a detailed description of these questionnaires is lacking. It is important to clearly describe each questionnaire's purpose, structure, assessment methods, and cutoff values in the methods section.

**Reply 4:** Thanks very much for pointing this out. When deciding which information to include in the methods, we encountered issues concerning the length of the manuscript. However, a pioneering work that has been published in 2018 (Liu et al., The Journal of Sexual Medicine, v. 15, n. 8) urgently claimed that studies about ED and mental health outcomes should adopt and report the psychometric properties of the instruments, while also giving preference to measures that are widely used elsewhere. This allows fair comparisons and, in the

long term, could support pooled analyses that will potentially elucidate the issues covered in our manuscript. Moreover, since we received the feedback on our manuscript, a quite interesting paper has been published (Scofield et al., HIV Medicine, in press, 2024). Consequently, we now fully revamped the section “Data collection procedures” by adding essential information for assessing the appropriateness of the measures used as seen in other manuscripts of high quality (i.e., HIV Medicine)

**Changes in the text:** Page 5, lines 15-30.

**Comment 5:** Were there any missing values for all data? If there were missing values, please report what treatment was used (e.g., complete case analysis, multiple assignment methods).

**Reply 5:** There were no missing values in the dataset. We emphasized that in the text. Also, when summing up the values in Table 2, all of them total 120.

**Changes in the text:** Page 6, lines 2-4.

**Comment 6:** Does Table 1 show the univariate binomial logistic regression analysis results? Perhaps the title of Table 1 should be changed as it seems as if the table is just descriptive statistics.

**Reply 6:** Apologies for this poor explanation from our part regarding this Table. As we included a demographic Table, the former Table 1 now reads as Table 2. It contains both bivariate analyses (i.e., chi-squared statistics and raw estimates from logistic regression). We updated the data analysis section and also added more information in the first paragraph of the results. The title of the Table has been corrected.

**Changes in the text:** Page 6, lines 2-25 and also in Table 2.

**Comment 7:** Table 2 shows the results of multivariate binomial logistic regression analysis, but why are only two variables, HIV Antiretroviral Therapy (ART) and Anxiety, employed? The results in Table 1 also show Age and Comorbidities as independent variables significantly associated with ED. Were only variables found to be significantly different in the univariate analysis put into the multivariate model, or were variables considered clinically important selected? If you report results from univariate and multivariate analyses, clearly explain each analysis's purpose and differences in interpretation.

**Reply 7:** We once again are very grateful for the reviewer stressing this. We kept only the significant predictors, albeit the model did include the other variables. The Table has been corrected and now includes all the predictors, both the significant and non-significant ones, along with the OR and 95%CI.

**Changes in the text:** Table 3.

**Comment 8:** “Ansiety” in Table 1 is probably a misspelling of “Anxiety.”

**Reply 8:** Apologies for this typo. It has been corrected.

**Changes in the text:** Correction in Table 1.

**Comment 9:** You state, "for male individuals living with HIV ( $p < 0.005$ )." However, since Table 3 is comparing with and without ED in HIV patients, is it not ED men living with HIV?

**Reply 9:** That's very true. We have corrected it.

**Changes in the text:** Page 7, lines 17-19

**Comment 10:** You state, "The correlation analysis showed a significant association ( $OR = 2.48$ ) between anxiety and ED." Isn't this a logistic regression analysis, not a correlation analysis?

**Reply 10:** The reviewer is absolutely right. We corrected this.

**Changes in the text:** Page 11, line 32.

**Comment 11:** HIV patients with EDs appear to have higher levels of depression and stress as well as anxiety. On the other hand, how can we consider that depression and stress were not shown as risk factors?

**Reply 11:** We also considered this aspect when analyzing the data. What stands out is that these symptoms might overlap, thus contributing to an overarching model of "negative affect". Hence, we added a few sentences in this respect while also emphasizing that these measurements are used for screening processes. They are not a substitute of a formal diagnosis.

**Changes in the text:** Page 11, lines 19-24.

**Comment 12:** You state, " With a sample of 120 participants and reaching a confidence level of approximately 80%, the results can be extrapolated to the health region covered by the research." I did not understand what this sentence meant. Please explain a little more.

**Reply 12:** The sentence was indeed confusing. We toned it down a bit.

**Changes in the text:** Page 8, lines 1-10

**Comment 13:** Given the limitations of cross-sectional studies, please suggest future research. Longitudinal designs, such as prospective cohort studies and randomized controlled trials, must examine causal relationships. Long-term follow-up studies are also essential to identify factors that influence the development and progression of ED. Including these aspects in your considerations will help clarify the limitations of your study and directions for future research.

**Reply 13:** That's an excellent point. We fully comply with it.

**Changes in the text:** Page 13, lines 1-6.