

COMMENT



A commentary on: “Erectile dysfunction in patients with anxiety disorders: a systematic review”

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Erectile dysfunction (ED) is a frustrating disease with increased prevalence in younger men over the last years [1]. In the systematic review: “Erectile dysfunction in patients with anxiety disorders: a systematic review”, the authors aimed to define the prevalence and severity of ED in males with anxiety disorders [2]. The review is imperative in shedding light on the understudied parts of ED and attempting to report a correlation between these conditions. A possible correlation could be beneficial in planning of care for this challenging subset of ED patients to achieve better outcomes.

Authors have done a remarkable work and constituted a well-written systematic review of exposures with an a-priori protocol [3]. That being said, there are certain methodologic limitations that are worth mentioning. First, the authors stated the study has been conducted in accordance with PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guideline but follows the outdated 2009 PRISMA statement instead of the PRISMA 2020 statement, which replaced the previous one and has many changes, including new reporting guidance that reflects advances in methods to identify, select, appraise, and synthesize studies [4]. Another issue is the lack of explanations of deviations from the protocol, changes made to the protocol and the lack of justifications for these changes in the manuscript. The statement in PROSPERO about protocol versions “Changes were made to the inclusion criteria, as we found promising studies with large sample size, but these studies were retrospective so the diagnosis of ED was already made by the clinician and it was not specified how these diagnoses were made.” This statement is very concerning for the fact that it indicates a major change in inclusion criteria in order to accommodate more “promising” studies that favors the hypothesis of the study which introduces major concerns for bias that decreases the credibility of the study. These changes should also have been included in the main manuscript as “deviations from the protocol”.

It would be ideal to report the list of studies that were excluded at full-text stage and the reasons for exclusion, studies that were identified as ongoing, and the attempts made to contact the authors of these studies, per Cochrane Handbook for Systematic Reviews [5]. An additional concern related to the excluded studies in this review which might be considered a big limitation is that the authors decided not to include conference abstracts with no full-texts available. Although it is factual that a conference abstract is not the most detailed and evidence-based reporting method, it may definitely have enough information to meet inclusion criteria

and provide valuable data, particularly in studies where observational and/or non-randomized studies are included.

Additionally, the authors report duplicate study screening (two authors screening independently), which is the preferred method for the integrity of the study, but fail to keep this method in data extraction, which is the most crucial part of systematic reviews. It is strongly recommended that systematic review authors do the data extraction in duplicates as well. Furthermore, in the “data collection and data items” part, the authors report three outcome measures (prevalence, severity, and risk factors); however, only two of which (prevalence and severity) were mentioned in the protocol. There is also no justification or mention as to why this deviation from the protocol is made, which introduces further bias [2].

The systematic review neither refers to a meta-analysis, nor reports structured pooling of data. However, there are reports of pooled data on the prevalence and severity outcomes in the form of median (range and interquartile range) that the results are based on. In our opinion, this is not an ideal way of pooling the prevalence and contemplating results from. We would like to indicate that meta-analyzing prevalence would be the preferred model to derive conclusions from, but we also acknowledge that this is a challenging task that requires certain methods like “double arcsine transformation” or “logit” and may require the use of third party software [6]. Last, although there are remarks in the discussion and results sections to point out the high heterogeneity of the studies included in these outcomes, there was no structured assessment of the certainty of evidence. A feasible and commonly used method of assessing the certainty of evidence in a per-outcome basis to either downgrade the evidence (for risk of bias of included studies, inconsistency, indirectness, imprecision, reporting bias) or upgrade the evidence (for very large pooled effect, dose-response relation, presence of bias that would lower the effect estimate) is GRADE methodology [7]. It is important to note that per GRADE guidelines baseline certainty of evidence for this study would be “low” as the systematic review is based on observational studies and would most likely require a downgrade to “very low” due to having serious inconsistency.

Overall, this review brings attention to a great clinical question and has strong potential to initiate further high-quality studies in this field. Nevertheless, it is hard to conclude a true effect of the increased prevalence of ED in the study population solely based on this study's findings considering the abovementioned limitations in the methodology. We would encourage authors to follow

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a more meticulous methodology for reviews of systematic reviews of exposures in future endeavors.

DATA AVAILABILITY

Data sharing is not applicable to this article as no datasets were generated or analyzed during this commentary.

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AUTHOR CONTRIBUTIONS

OE: writing-original draft, writing review & editing, methodology. AG: writing-review & editing, supervision.

COMPRTING INTERESTS

Corresponding author (OE) is an associate-editor at IJIR: Your Sexual Medicine Journal but is not involved with any of the processing and/or reviewing stages of this manuscript.