Review Form 3

Journal Name:	**Journal of Advances in Medicine and Medical Research**
Manuscript Number:	**Ms_JAMMR_130979**
Title of the Manuscript:	**Clinical Reasoning Assessment Tool (CRAT) for Preclinical Medical Students: a validation study.**
Type of the Article	

PART 1: Comments

	Reviewer's comment	Author's Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	The development of a clinical reasoning assessment tool is a valuable contribution, particularly in medical education, and the study explores a promising instrument.	
Is the title of the article suitable? **(If not please suggest an alternative title)**	The title of the article may not fully reflect the scope of the study, as it only involves advanced learners (year 4 students and medical residents) rather than preclinical students. A more accurate title could be: 'Preliminary Validation of the Clinical Reasoning Assessment Tool (CRAT) in Advanced Medical Learners' This better captures the population studied and the study's preliminary nature	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The abstract is clear but could be more concise and aligned with the study's actual sample. The objective mentions preclinical students, but the study sample includes more advanced learners (fourth-year students and medical residents). Clarify that the tool was tested on advanced learners with the intent for preclinical students. The conclusion should avoid overgeneralization regarding preclinical students. Suggested revision: *"The CRAT, developed for preclinical students, was tested on advanced learners, showing its potential to discriminate accuracy and correlate with self-confidence."*	
Is the manuscript scientifically, correct? Please write here.	The use of fourth-year students and medical residents instead of preclinical students limits generalizability. The small sample sizes (n=7) may also affect the reliability of the results.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Yes	

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Is the language/English quality of the article suitable for scholarly communications?	The language quality is generally suitable for scholarly communication, but there is a missing word in the Methods section: 'The distribution of the was as follows.' It should be clarified, perhaps as 'The distribution of the questions was as follows.'	
Optional/General comments	The authors did not specify the language in which the questionnaire was prepared. This should be clarified for transparency and reproducibility. Results: The Kolmogorov-Smirnov (K-S) test values in parentheses should be clearly identified as p-values (e.g., $p = 0.200$). However, with $n = 7$ in each group, a non-significant K-S test cannot reliably confirm normality, especially with such a small sample size. It is recommended to supplement this analysis with visual checks, such as histograms. In cases of uncertainty, using non-parametric methods would be advisable to avoid making incorrect assumptions about normality. The only significant difference was found in differential diagnosis (4YMS: 71% vs. IMMR: 91%, p = 0.006), with no differences observed in other clinical reasoning components. The lack of significant differences in other components could indicate that the instrument was not sensitive enough to detect finer differences in basic clinical reasoning skills. I recommend checking for floor and ceiling effects to ensure the questionnaire is sensitive enough to capture the full range of participant responses. Figure 2 (the scatter plot) does not clearly specify whether the correlations are based on the overall sample or a specific group. This should be clarified in both the methods section and the figure itself. It would also be useful to provide context for the reader regarding what constitutes "good" or "poor" accuracy and self-confidence in these plots. In general, the study involved more advanced learners (4th-year students and residents), with no validation conducted on preclinical students. To establish discriminant validity and demonstrate the CRAT's suitability for preclinical curricula, it is essential to include preclinical students. Without their inclusion, the claim that the CRAT is appropriate for use in preclinical settings remains limited. In addition, the small sample size raises concerns about the statistical power and the generalizability of the findings. The authors should address this limitation more explicitly and discuss how it might impact the conclusions. Expanding the sample size and including a more diverse group (including preclinical students) would improve the generalizability of the results.	

PART 2:

	Reviewer's comment	Author's comment *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

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