

## **Faculty development programs improve the quality of Multiple Choice Questions items' writing**

Hamza Mohammad Abdulghani<sup>1</sup>, Farah Ahmad<sup>1</sup>, Mohammad Irshad<sup>1</sup>, Mahmood Salah Khalil<sup>1</sup>, Ghadeer Khalid Alshaikh<sup>1</sup>, Sadiqa Syed<sup>1</sup>, Abdulmajeed Abdurrahman Aldrees<sup>1</sup>, Nourah Alrowais<sup>2</sup>, Shafiul Haque<sup>3</sup>

## Appendix 1. Guidelines for avoiding common item writing flaws in MCQs

- 1) In pre-clinical 40% of total MCQs and in clinical phases 70-80% or all of total MCQs should be Scenario based and the scenario should be related to the question.
- 2) Avoid negative questions. e.g., Which ONE of the following is NOT a characteristic...
- 3) No "EXCEPT" marked question.
- 4) Avoid usage of ambiguous (e.g., frequently, often, occasionally) or absolute terms (e.g. almost, never, frequent).
- 5) Options do not give clue to the answer [a word in the stem repeated in the option(s)].
- 6) All options are uniform/homogenous, e.g., Identification/Diagnosis/Management as a separate entity in each question.
- 7) All options must be short and of a similar length. A single long option should not be a correct answer, which gives the clue of being the true answer.
- 8) Avoid 'all of the above' or 'none of the above' option
- 9) Put the options in a chronological order; i.e., ascending/descending if numerical, and alphabetical otherwise.
- 10) Use questions and avoid phrases, e.g., Regarding epilepsy:
- 11) Should have only one correct answer.
- 12) Should fulfill the cover test, i.e., if you cover the options, you can answer the questions (the single most important criteria for a good MCQ).
- 13) Options shouldn't be overlapped.
- 14) Stem should be clear.
- 15) Lead in should be clear.
- 16) Answer should not hinged to another question.
- 17) Avoid True or False.
- 18) Scenario should be functional.
- 19) Format of question is shown below:

**SCENARIO**

**Lead in (Question)**

- A.  
B. (Options)  
C.  
D.