Dear Editor,

We have read the review article entitled “What do Ayurveda Postgraduate Entrance Examinations actually assess?” Results of a five-year period question paper analysis based on Bloom’s taxonomy published in your journal [1].

What do Ayurveda Postgraduate Entrance Examinations actually assess? - The relevance of the question lies in the fact that it is a milestone in the journey of a student from being an undergraduate to becoming the initiators of the much awaited renaissance in Ayurveda i.e. Vaidya-scientist [2]. Therefore assessing the methodology of assessment (Post Graduation entrance exam) itself, becomes an integral domain of education in Ayurveda.

In the year 2018, All India AYUSH Post graduation entrance exam (AIAPGET) an all India ranking exam, single window entrance examination that was conducted by All India Institute of Ayurveda, New Delhi on the behalf of Ministry of AYUSH.

More than 14,000 BAMS graduates participated in the exam (including the author and co-author) and it was observed that AIAPGET-2018 was an instance of paradigm shift from core memory based questions to more analytical questions as observed by the students participated in the exam. The shift offered better opportunities to students, who developed their theoretical skills along with clinical/practical as well as analytical skills because this dynamic approach assessed their cognitive dexterity.

The present communication deals with inquiring into two longitudinal probes that require resolution.

1. Was AIAPGET-2018 an applied picture of the reforms suggested in reference to the pattern for framing MCQ’s for the post graduation Ayurveda entrance exam?
2. How can the exam be an upgraded tool to select the right minds for Ayurveda?

1. Our Observations

**Scheme of AIAPGET-2018:**
100 Multiple Choice Questions (MCQ) were administered on computer-based platform. Time allotted was 90 min.

Relevant observations [1] have been helpful for the students in framing the strategy for the exam.

Most of the students start the preparation, a year before the exam and the strategy was prepared, based on the data available in terms of subject-wise distribution of questions, skills required for solving MCQs and time-management techniques required so that one could manage their study hours along with the clinical studies during internship.

Recent trends in subject-wise distribution of questions was very well displayed in the mentioned article which is as follows - 78.9% questions from Ayurveda and 21.1% questions from biomedical sciences [1].

The further distribution of Ayurveda subjects and the number of expected questions from each subject and samhita, has given a proportional idea, instrumental in time-distribution and schedule preparation.

2. Exam then to exam now - analysis based on Bloom's taxonomy

The research paper under consideration [1] was published in 2016 and we analyzed its impact on the pattern of PG entrance exam conducted in 2018 i.e. AIAPGET 2018.

Total 100 questions were taken into assessment (though 5 questions were taken under grievances section by the examination authority due to some technical errors with the 4 options, the result was prepared taking into 95 questions). But as these five questions were complete, they too were considered for assessment by the authors.

The author and co-author studied the concept of Bloom's taxonomy thoroughly. The revised taxonomy used the “action words” to describe the cognitive processes, the same were used by the authors to categorise the questions. The authors rated each question separately and the lower level was taken as the final level in case of disparities.

**Distribution of questions (AIAPGET 2018) based on bloom’s taxonomy.**

- Level 1 (Knowledge/Recall-based) is 84%
- Level 2 (Comprehension) is 6%
- Level 3 (Application) is 2%
- Level 4 (Analysis) is 2%
- Level 5 (Evaluation) is 2%
- Level 6 (Synthesis) is 4%

“Bloom’s taxonomy reiterates Pramana” a previous letter [3] for the same article quotes that this taxonomy can be traced back to the concept of Pramanas.

Taking this notion, the authors have tried to classify the levels in terms of pramanas. [4].

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“All India AYUSH post graduation entrance exam - Right method to choose the right minds for Ayurveda?”

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1. **Peer review under responsibility of Transdisciplinary University, Bangalore**

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Correlation between level of Bloom’s taxonomy and praman Distribution of questions (AIAPGET 2018) is also shown in Table 1.

3. Significant objective of conducting PG entrance exam-ayurveda

The objective of conducting PG entrance exam and the correct methodology for the same should be clear in every perspective.

An examination should be crafted to look for the traits of efficient knowledge (cognitive domain) along also skills (psychomotor domain) and even attitudes (affective domain).

Recent upgradations in the pattern of entrance exam from Recall-based questions/Memory based questions to assess higher order thinking skills and this research paper has been the building block of this much required upgradation.

Further upgradations w.r.t. this system of examination are that the distribution of subjects and the weighting must be made transparent, pattern of questions should be enhanced by incorporation of questions which can test comprehension, application, analytical evaluation and synthesis skills of a student.

4. Future strategies

A shift is required in the examination pattern and in the framing of multiple choice questions for AIAPGET - a shift from regular memory based questions to skill based questions.

This can be done by incorporating bloom’s taxonomy in the process of framing questions. This will further encourage the students to improve their analytical skills and other cognitive domains.

There are a few strategies proposed w.r.t. AIAPGET, which are as follows:

1. An empirical framework for AIAPGET questions, can be formulated, through which samhita-wise & subject-wise distribution of questions can be prepared and it should be transparent to all.
2. Emphasis should be given on questions assessing higher order thinking skills rather than regular memory based questions.
3. Curricula should include the recent advances of fundamental, drug, translational and clinical fields so that the BAMS students can be sensitized to the recent trends.
4. Bloom’s taxonomy is an ideal educational framework for teaching purposes as well as for applied practices in clinics. As we observed that “knowledge” refers to the conceptualization of a science and with the basic guidelines of clinical practice, “analysis” with the diagnosis considering of the presenting complaints and signs. “Evaluation” is done to assess the clinical signs and to map the samprapti (pathogenesis) and then an individualised solution to the problem needs to be “created”.

Another concern that comes along is the regulation of examination in the state as well as central universities. It is observed usually that there is no uniformity regarding the conduction of annual examination among the colleges.

There is a need of body like a board of examination that can regulate the examination system in all the colleges of BAMS and post graduation as well, so that a systematized uniformity can be maintained for the purpose of pattern of annual examination.

Ayurveda is in a state of exponential growth, therefore the future infrastructure of this growth i.e. Vaidyas should be flourished in all the dimensions – the dimensions of clinics, academics and research, they can be known as Vaidya-scientist [2].

The gateway of entry to this journey is guarded by PG entrance examination. We can rightly conclude that finer the sieve is, finer will be the filtrate.

Declaration of Competing Interest

None.

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