

A Study of Self-perception and Self-perceived Importance of Final Year UG Students Regarding Acquisition of Core Competencies in Ophthalmology

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ABSTRACT

Introduction: Competency is an ability to perform a task fruitfully, confidently, and responsibly. At present, the UG curriculum is vast, and imparting skill is a challenge and rarely evaluated.

Aims: To study the self-perception of confidence level pertaining to four core competencies in ophthalmology—recording visual acuity, pupillary response to light, extraocular movements, and confrontation fields and to study the self-perceived importance of these competencies.

Materials and methods: Study involved students of 9th semester. A questionnaire was administered testing competencies regarding visual acuity testing, pupillary light reflex, confrontation fields, and extraocular movements. The responses were marked on the Likert scale. Results were expressed as percentages.

Results: Confidence level for various competencies was 98.6%, 97.1%, 96.4%, and 85.7% for visual acuity, extraocular movements, pupillary light reflex, and confrontation fields, respectively. The self-perceived importance of these competencies was 95.7% for extraocular movements, 94.3% pupillary light reflex, visual acuity 92.1%, and 78.4% for confrontation testing.

Conclusion: More than 98% of the students were confident in visual acuity testing, and it was the least for confrontation fields 78%. The self-perceived importance also showed almost similar results, 95.7% for extraocular movements and 78.4% for confrontation testing.

Keywords: Confidence levels, Ophthalmology skills, Self-perceived importance, Undergraduate students.

SBV Journal of Basic, Clinical and Applied Health Science (2019): 10.5005/jp-journals-10082-02212

INTRODUCTION

Competency is defined as the ability to act appropriately responsibly and successfully in specific settings marked by a high degree of complexity, novelty that demands high-quality solutions.¹ Shaper describes characteristics of academic competence that causes scholarly work, problem-solving and decision-making and reflection.² Competency-based education is an approach to prepare graduates with abilities based on social and patient needs.³ Epstein and Hundert define competency as habitual and judicious use of communication, knowledge, technical skills clinical reasoning, emotions, values, and reflection in daily practice for the benefit of individuals and communities being served.⁴

In the present scenario, the undergraduate ophthalmology curriculum is vast, and more time is devoted to transferring knowledge through lectures and acquisition of clinical skill MCI in its recent document has included visual acuity testing as the sole skill to be learned although other skills are being taught to the students. It is not given due importance and also rarely evaluated,⁵ hence the purpose of the study was to evaluate the student confidence in four of the skills imparted and their perception about their relevance of those competencies for the clinical practice.

MATERIALS AND METHODS

The study was approved by the Institute Ethics Committee, and the purpose of the study was explained to the final year MBBS students of Mahatma Gandhi Medical College who are in final year MBBS and those who have completed the ophthalmology examination and willing to participate in the questionnaire-based study were administered a questionnaire.⁶ We restricted the study

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How to cite this article: Srikanth K. A Study of Self-perception and Self-perceived Importance of Final Year UG Students Regarding Acquisition of Core Competencies in Ophthalmology. *J Basic Clin Appl Health Sci* 2019;2(3):105–107.

Source of support: Sri Balaji Vidyapeeth Deemed University

Conflict of interest: None

only to final years who had completed ophthalmology posting to avoid duress and also to check how they have retained the skills with various competencies in ophthalmology, which were taught to them during their ophthalmology postings and were asked to note their responses in the Likert scale from 1 to 5. We developed the Likert-based questionnaire based on the importance of the skills being addressed and also on personal experience. Based on their responses, the responses were analyzed. The analysis was done using version 16 (IBM, Armonk, New York, USA) software. The competencies being assessed were:

- Recording visual acuity,
- Testing the pupillary response to light,
- Extraocular movements,
- Confrontation field testing.

Another questionnaire that analyzed their perception of the importance of the competency was administered, and their responses marked in the Likert scale. The four skills that were identified to be important as a clinician were taken for the study, and their perception of the importance was marked on the Likert scale and was administered as a questionnaire, and the students were asked to mark their choice. The questionnaire was administered after explaining the purpose of the study simultaneously to the students who were at various places to avoid as much as possible cross consultation. Their responses were analyzed using SPSS version 16 (IBM, Armonk, New York, USA) software, and the results are expressed as percentages.

RESULTS

Total number of students surveyed was 139. Boys constituted 54 and girls were 85 in number. Their confidence level for the competencies were 98.6% (n = 130) for visual acuity testing followed by 97.1% (n = 250) for extraocular movements, 96.4% for pupillary light reflex and 85.7 (n = 135) (Fig. 1).

The self-perception about the importance of these competencies were 95.7% (n = 133) for extraocular movements, 94.3% (n = 131), visual acuity 92.1% (n = 128) and 78.4% (n = 109) for confrontation testing (Fig. 2).

DISCUSSION

Our study showed a high level of confidence among students in visual acuity testing followed by extraocular movements, pupillary light reflex, and confrontation visual fields, respectively. Their perceived importance was also the highest for visual acuity testing and least for confrontation testing.

Eze found the highest level of confidence for visual acuity testing, which is similar to our study. They found higher confidence for confrontation testing (93%), while our study showed the level of confidence to be much lower (78%).⁷ This could be due to the method of teaching and the skill not being assessed regularly during clinical.

A study done by Noble showed competence and confidence levels in ophthalmic skills were highest for visual acuity testing.⁸ Our study is in alignment with this study.

A study by Hill showed that student perceptions of visual acuity testing were found to be highly positive and also important, which is in agreement with our findings. This high confidence of visual acuity testing could be due to the fact that visual acuity testing is the most common parameter tested in ophthalmology examination, and the students are frequently exposed to this skill.⁹

A study by Lippa showed higher rates of competency for visual acuity testing and least for confrontation fields, which is similar to our findings.¹⁰

The MCI, in its recent competency-based curriculum, has identified eight skills for competency assessment.¹¹ However, we cannot ignore other competencies like a pupillary light reflex and confrontation visual fields, as they are vital in assessing patients in an emergency clinical setting.

Based on our experience, in the routine clinical examination and in emergencies, these competencies are very important. The assessment strategy has to be made more objective and programmatic to address the deficiencies. Similarly, other competencies are to be included and assessed for being given due importance as assessment stimulates learning.

The following steps are to be taken to make an undergraduate competent like, including these clinical skills in assessment, motivate the student to perform these skills, and teaching them their importance in day-to-day practice. Moreover, information technology can be used by creating modules for individual clinical skills.

Our study has a few limitations. Ours was a single point study. Also, the seriousness of the students could not be monitored. There was a possibility of being influenced by their peers during marking.

CONCLUSION

Majority of the students (98%) were confident in performing visual acuity confidently, and it was least for confrontation testing. Their views on the importance of these competencies also reflected the same, i.e., 78% for confrontation testing. This study underlines the need to take into consideration the students’ perception of competencies. Students also need more practice of competencies where they appear least confident.

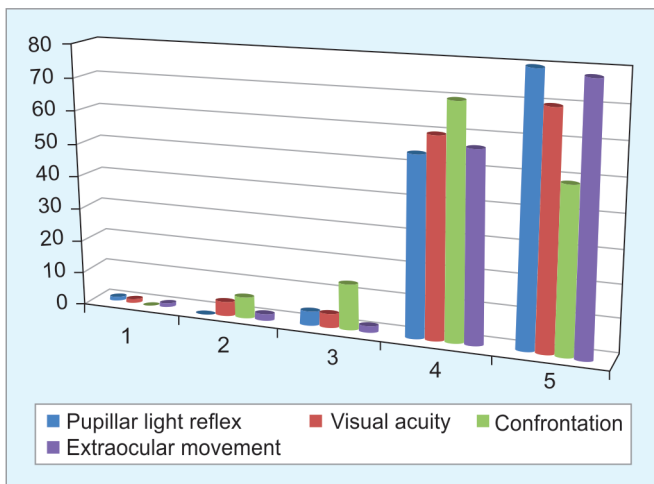


Fig. 1: Confidence level of various competencies

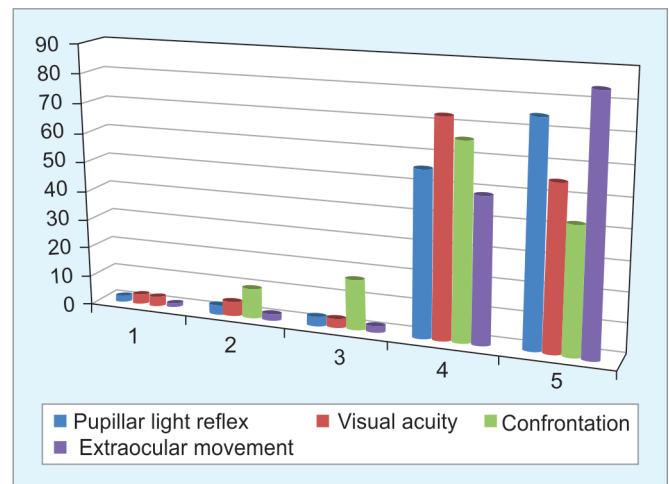


Fig. 2: Self-perceived importance of competencies



ACKNOWLEDGMENTS

The dean of MGMC and RI for permitting to undertake the study. The senior statistician Dr Ezhumalai for his help. The students of 9th semester for participating in the survey. Staff of MEU Sri Ramachandra Medical College and Research Center, Porur, Chennai. Dr BV Adkoli for his valuable inputs.

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