Short Communication

The impact of COVID-19 on the postgraduate exit examination in a clinical subject

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ABSTRACT

The year 2020 world experienced the rise of a new pandemic COVID-19 beginning. It started in India in early March. Maharashtra state saw a lockdown from March 2020. It has affected all the aspects of life in India including economy, patient care and medical education. The whole working system of hospitals had to be changed and most of the hospitals were divided into COVID and non-COVID parts. This article is an effort to study the perceptions of postgraduate medical students in the department of medicine on the exit examination at the end of three years of residency in a medical college in Pune. Along with the postgraduate student’s perceptions, views of examiners are also studied under four aspects protective measures during examination, assessment of knowledge using case scenarios, student’s experience of case presentation without physical presence of patients and overall satisfaction with the novel method of examination.

Keywords: COVID-19, Postgraduates, Exit examinations, Clinical subjects

INTRODUCTION

The novel coronavirus was discovered and confirmed since first case of unidentified pneumonia was confirmed in Wuhan, China in December 2019. The disease caused by this novel virus was officially named COVID-19 by WHO on 12/01/2020. Since the outbreak in China numbers of confirmed cases and deaths have rapidly increased with India ranking at third most affected in the world.¹

COVID-19 has been clarified as a grade B infectious disease and is being treated according to protocol for grade A infectious diseases. COVID-19 is the seventh known coronavirus induced disease that involves infection of respiratory tract in human beings. Corona pandemic started in India in early March. Postgraduate residents from medicine department were recruited to work on the front line. Even the examinations going postgraduate residents were not relieved were on duty in COVID OPD, COVID critical care areas and COVID high dependency units. The cases started rising and the so did the workload.²

All the postgraduate residents including the regular batch students had to adjust to a lot of difficult situations. Due to lockdown even the repeater residents who were at home had a tough time travelling back to Pune. Faculty of Medicine had been working in COVID and Non COVID areas as well as doing their Post graduate and Undergraduate teaching using online platforms like Microsoft teams, thereby easing out the burden on teaching physicians a little bit. In government institutions the postgraduate exams have been cancelled until further notice. In our institute the exam going postgraduates were relieved in the first week of June and the examination was conducted in first week of July.
Naturally there was anxiety amongst exam going Postgraduate students about how the examination was going to be conducted. There were other factors like availability of patients needed for the examination being a major clinical subject. Previous bedside Post graduate clinics used for hands on experience had to be cancelled due to social distancing measures. At our institute postgraduate final examination had to be postponed and a preliminary examination had to be cancelled. It was possible to conduct theory examination with social distancing. Practical examination was conducted using case scenarios in the absence of patients. We studied perceptions of candidates using an online questionnaire. Other alternate options were vivas conducted via video and final assessment of the examination going post graduate student by course work instead of exams.

METHODS

For practical examination, the students were given case scenarios for long and short cases, which included patient’s history, clinical examination findings. After the examination a feedback form was given to both the examiners and the candidates who appeared for the examination via google docx. Their confidentiality was ensured. The responses were compiled and then results for the same were evaluated. The following questions were included in the proforma for the candidates; Inputs given in the case scenario were adequate to case presentation, despite absence of patients my experience of case presentation was good, such examination format can assess students knowledge adequately, clinical skills can be assessed adequately with this format of examination, case scenarios can be utilized routinely in the traditional method of examination, social distancing and other precautions as per guidelines suggested in the covid pandemic were followed adequately, I am satisfied with overall experience of the examination. Any suggestions for making exam format more meaningful.

The following questions were included in the proforma for the examiners; inputs given in the case scenario were adequate for case presentation, despite absence of patients my experience of case presentation was good, such examination format can assess students knowledge adequately, clinical skills can be assessed adequately with this format of examination, case scenarios can be utilized routinely in the traditional method of examination, I am satisfied with overall experience of the examination, any suggestions for making exam format more meaningful. The examiners and the candidates were asked to rate their response from amongst the following options, then results were compiled, strongly disagree, disagree, neither agree nor disagree, agree, strongly agree.

RESULTS

Total 14 candidates appeared for the examination out of which 10 were freshers and 4 were repeaters. 12 (85%) candidates were satisfied with the inputs given in the case scenarios for case presentation. Only 2 (14.2%) candidates neither agreed nor disagreed for this. While 11 (78.5%) candidates reported good experience of case presentation despite of absence of patient, 3 (21.4%) candidates gave a neutral opinion. 11 (78.5%) candidates were of opinion that their knowledge was assessed adequately by this new format while 1 (7.1%) candidate strongly disagreed to this. Only 3 (21.3%) candidates were satisfied regarding their clinical skills assessment, while 7 (50%) candidates disagreed that this format of examination could not assess their clinical skills adequately (of these 7 candidates, 6 were freshers while only 1 candidate was repeater who had experienced both the formats of examination i.e. traditional and this new one). 12 (84.5%) candidates were of opinion that case scenarios can be used routinely in the traditional method of examination. All 14 (100%) candidates agreed that social distancing and other precautions were followed adequately as per guidelines suggested in the COVID pandemic. 13 (92.8%) candidates were satisfied with overall experience of the examination.

Total numbers of examiners were 4, 2 internal and 2 external. Three (75%) were satisfied with the case scenarios given for case presentation while 1 (25%) gave a neutral response. One (25%) examiner was not satisfied with the case presentation in absence of patient while 2 (50%) were satisfied. Two (50%) examiners didn’t agree that this novel method could assess student’s knowledge adequately while one was of neutral opinion and one agreed. While 3 examiners (75%) didn’t agree that new format could assess students clinical knowledge adequately, one examiner gave a neutral opinion. Two (50%) examiners agreed that case scenarios can be utilized routinely in the traditional method of examination, while 2 (50%) neither agreed nor disagreed. All examiners were satisfied with overall experience of the examination.

| Table 1: Responses of postgraduate students. |
|---------------------------------------------|
| **Response** | 1 | 2 | 3 | 4 | 5 |
| **Questions** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** |
| A | - | - | - | - | 2 | 14.2 | 6 | 42.8 | 6 | 42.8 |
| B | - | - | - | - | 3 | 21.4 | 7 | 50 | 4 | 28.5 |
| C | 1 | 7.1 | - | - | 2 | 14.2 | 4 | 28.5 | 7 | 50 |
| D | - | - | 7 | 50 | 4 | 28.5 | 2 | 14.2 | 1 | 7.1 |
| E | - | - | 1 | 7.1 | 1 | 7.1 | 6 | 42.8 | 6 | 42.8 |
| F | - | - | - | - | - | 1 | 7.1 | 13 | 92.8 |
| G | - | - | - | - | 1 | 7.1 | 5 | 35.7 | 8 | 57.1 |
Table 2: Responses of examiners.

| Response | 1 | 2 | 3 | 4 | 5 |
|----------|---|---|---|---|---|
| Questions | N % | N % | N % | N % | N % |
| A        | - | - | - | - | 1 | 25 | 2 | 50 | 1 | 25 |
| B        | - | - | 1 | 25 | 1 | 25 | 2 | 50 | - | - |
| C        | 1 | 25 | 1 | 25 | 1 | 25 | - | - | 1 | 25 |
| D        | 2 | 50 | 1 | 25% | 1 | 25 | - | - | - | - |
| E        | - | - | - | - | 2 | 50 | 2 | 50 | - | - |
| F        | - | - | - | - | - | - | - | - | 4 | 100 |

DISCUSSION

At present it is predicted that the COVID pandemic will continue for a long time and is affecting all aspects of life, medical education and assessment of medical students is one of them. The teaching, training of Undergraduate and Post graduate students as well as to conduct their examination in time is a big challenge specially for the medicine department clinicians. The Faculty as well as the Residents are working continuously as frontline warriors in COVID as well as non COVID areas. Evaluation of students in the form of a formal examination needs to be planned properly.

CONCLUSION

We suggest some modifications of examination system amidst the ongoing pandemic. We have to focus first on unnecessary exposure of patients and their relatives and our students. We suggest following practices for evaluation of post graduate students in major clinical subjects like Medicine. Use of clinical case scenarios that are interactive as substitute to real patients. The clinical case scenarios to be based on real life cases seen frequently in clinical practice and they can be used at least partly even after the pandemic is over. We agree that clinical skills of students cannot be checked adequately using case scenarios. Additional weightage should be given to students progress in three years, routine clinical work, yearly examination rather than one examination in the end.

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REFERENCES

1. Birch E, de Wolf M. A novel approach to medical school examinations during the COVID-19 pandemic. Med Edu. 2020;25(1):178-85.
2. Harvey A. Covid-19: medical students and FY1 doctors to be given early registration to help combat covid-19. BMJ. 2020;52:1268-75.
3. Wang S, Dai M. Status and situation of postgraduate medical students in China under the influence of COVID-19. Postgrad Med J. 2020;56:137-45.
4. Algiraigri A. Postgraduate medical training and covid-19 pandemic: should we stop, freeze, or continue?. Health Prof Educ. 2020;6(2):123-5.
5. Rajagopalan P. The deadly corona virus (covid-19) journal of communicable diseases. 2020;52(01):78-81.
6. Thakur J. Novel coronavirus pandemic may worsen existing global noncommunicable disease crisis. Int J Noncommu Dis. 2020;5(1):1.
7. Patil A, Ranjan R, Kumar P, Narang H. Impact of COVID-19 pandemic on post-graduate medical education and training in India: lessons learned and opportunities offered. Adv Med Educ Pract. 2021;12:809-16.
8. Xu Y, Li X. A commentary on COVID-19 impact on surgical training and recovery planning (COVID-STAR) - A cross-sectional observational study. Int J Surg. 2021;91:106-11.

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