ABSTRACT

Introduction: According to the notification dated May 17, 2018, no. DE-14-MDS-2018/2131 published by the Dental Council of India, basic sciences theory examination (Paper-1) will be conducted before the commencement of II-year MDS academic year instead of III-year MDS end. Hence, this study was conducted to assess the opinions regarding this recent change in the curriculum among I MDS students, II MDS students, and their respective postgraduate (PG) guides.

Methodology: The study was conducted on 120 participants from three dental colleges. All the participants were interviewed using a pretested, structured questionnaire. The initial part of questionnaire consisted of demographic information of the study participants followed by ten questions targeted to assess the perception toward change in MDS examination pattern. Statistical analysis was performed using SPSS software v20, and Chi-square test was used for comparison of responses among PG students and PG guides.

Results: Questions pertaining to the need of allowed to keep term (ATKT), assumption to improved concentration on specialization subjects, and increase in understanding of the subject have received maximum positive response. Negative responses were more for the questions such as hampering of PG curriculum, effect on dissertation selection process, and rendering quality treatment to the patient. Responses to necessity of ATKT and the assumption to better concentrate on specialization subject later differed significantly among the participants.

Conclusion: The present study results revealed an overall positive perception toward the change in MDS curriculum pattern among the study participants.

Keywords: Examination pattern, postgraduate studies, survey

INTRODUCTION

Dental education in India is one of the sought-after professional fields.[1] Moreover, with nearly 259 dental colleges with around 6000 postgraduate (PG) trainees every year, the Dental Council of India (DCI)[2] is always at forefront to endeavor vicissitudes, as and when necessary. Since the inception of the DCI, there have been several such modulations brought to the dental education in India and one being the recently made changes in PG (MDS) examination pattern. According to the recent amendment, basic sciences theory examination will be conducted before the commencement of II-year MDS academic year instead of III-year MDS end.[3]

The dental curriculum should be scientifically based, clinically relevant, medically informed and promote social
METHODOLOGY

Study design, study setting, and study participants

The present cross-sectional survey was conducted on a purposive sample of 120 dental PG students and PG guides. The sample size was determined by an online calculator available from http://www.raosoft.com/samplesize.html. The sample size of 120 was determined keeping margin of error at 3%, confidence level at 95%, response distribution at 50%, and considering a population size of 135 (total number of PG students studying in I and II MDS and PG guides in three dental institutes). Study subjects were selected from three neighboring dental institutes. Ethical clearance was obtained from the institutional ethical committee (Ref no: BV (DU) MC and H/Sangli/IEC/D-20/19). PG students from I and II MDS were included considering the nature of the study. Informed consent was obtained from the participants after explaining them the purpose of study.

Data sources/measurements

All the participants were interviewed using a pretested, structured questionnaire. The questionnaire was adapted from a previous study conducted by Khandelwal et al. Face validity of the questionnaire was assessed by four expert consensus. Experts evaluated each item for its wording and grammar, understandability, and relatedness and also for any suggestion. The questionnaires were collected and suggestions were considered. The questions were subjected to content validity (content validity; S-CVI/Ave [based on I-CVI]: 0.94; S-CVI/Ave [based on proportion relevance]: 0.95; S-CVI/UA: 0.84) before commencement of the study. The initial part of the questionnaire consisted of demographic information of the study participants followed by ten questions targeted to assess the perception toward change in MDS examination pattern. Each participant was given sufficient time (on an average 30 min) to fill the questionnaire.

Statistical analysis

Data were collected, compiled, and analyzed using SPSS version 20 (IBM Corporation, NY, USA). Results were presented in frequency and percentage. Differences in the responses among PG students and PG guides were compared using Chi-square test. Level of significance was kept at \( P \leq 0.05 \).

RESULTS

Demographic profile

Table 1 shows the distribution of study participants according to their gender and education level. In the present study, the male participants (45%) were outnumbered by their female counterparts (55%).

Table 2 shows the responses provided by the study participants. Questions pertaining to need of allowed to keep term (ATKT), assumption to improved concentration on specialization subjects, and increase in understanding of the subject have received maximum positive response of around 91.7%, 84.2%, and 85.8%, respectively. Negative responses were more for the questions such as hampering of PG curriculum, effect on dissertation selection process, and rendering quality treatment to the patient; 70.8%, 64.2%, and 84%, respectively.

Table 3 shows the differences between responses according to the education level. The difference was found to be significant for two questions, which were the necessity of ATKT and the assumption to better concentrate on specialization subject later. Rest other questions showed no statistical significance.

DISCUSSION

Most of the advancement in the field of dentistry has been limited to dental school operative protocols that put forward by dental school of developed countries, resulting
into expanding diversity in the curriculum covered and the standardization of the same. Hence, continued efforts are always being made by the concerned authorities of developing countries, like India, to bridge this gap and up-bring the dental education to global standards. The teaching culture always stresses the significance and necessity of continuous, structured student feedback. Moreover, it is imperative to know the student preferences toward learning environment, educational methodologies, and course curriculum.

In the current study, the total of three neighboring dental colleges was included as part of the study, and those consented to be part of the study turned out 45% males and 55% females. Furthermore, the study participants were selected and segregated into three different groups, i.e., I MDS (43.3%) and II MDS (38.3%) students along with PG guides (18.4%), faculties from respective specialization departments guiding PG students under them. The prime reason behind selecting only I MDS and II MDS students was to make sure that either participant is subjected to the new MDS syllabus pattern or about to in the ongoing academic year. In addition, the PG guide faculties play an important role in all 3 years of MDS curriculum.

The perception of both MDS students and PG guides was found to be in favor of new pattern of conducting basic sciences written examination at the end of academic I MDS curriculum. Like, the necessity to permit ATKT was favored greatly by both students and faculty with 91.7% votes. Comparing ‘necessity to permit ATKT’ was found statistically significant when compared among PG students and PG guides. However, the questions assessing hampering of PG activity due to preparation leave, effect on library dissertation, and thesis

### Table 2: Responses by study participants

| Question                                                   | Yes, n (%) | No, n (%) |
|-------------------------------------------------------------|------------|-----------|
| Is ATKT necessary?                                         | 110 (91.7) | 10 (8.3)  |
| Will preparation leave hamper PG activity?                 | 47 (39.2)  | 73 (60.8) |
| Does it affect other curriculum activity like LD and dissertation selection? | 43 (35.8)  | 77 (64.2) |
| Does it affect quality of patient work?                    | 36 (30)    | 84 (70)   |
| Initial protocol of conducting examination was better      | 55 (45.8)  | 65 (54.2) |
| Is there any need for taking examination in 1st year of MDS | 92 (76.1)  | 28 (23.3) |
| Is there adequate time for preparation of examination      | 68 (56.7)  | 52 (43.3) |
| Is there any pressure performance for passing examination with high score | 42 (35)    | 78 (65)   |
| Finishing basic paper in 1st year will on concentrating on individual specialized subject later | 101 (84.2) | 19 (15.8) |
| Does this pattern will help to increase understanding for basic subject | 103 (85.8) | 17 (14.2) |

ATKT: Allowed to keep term, LD: Library dissertation

### Table 3: Association between education level and responses received

| Question                                                   | Response  | I MDS | II MDS | PG guide | P        |
|-------------------------------------------------------------|-----------|-------|--------|----------|----------|
| Is ATKT necessary?                                         | Yes       | 96.2  | 82.6   | 100      | 0.016*   |
|                                                             | No        | 3.8   | 17.4   | 0        |          |
| Will preparation leave hamper PG activity?                 | Yes       | 38.5  | 37     | 39.2     | 0.790    |
|                                                             | No        | 61.5  | 63     | 60.8     |          |
| Does it affect other curriculum activity like LD and dissertation selection? | Yes  | 40.4  | 32.6   | 31.8     | 0.660    |
|                                                             | No        | 59.6  | 67.4   | 68.2     |          |
| Does it affect quality of patient work?                    | Yes       | 25    | 30.4   | 40.9     | 0.393    |
|                                                             | No        | 75    | 69.6   | 59.1     |          |
| Initial protocol of conducting examination was better      | Yes       | 44.2  | 54.3   | 31.8     | 0.208    |
|                                                             | No        | 55.8  | 45.7   | 68.2     |          |
| Is there any need for taking examination in 1st year of MDS | Yes       | 80.8  | 76.1   | 68.2     | 0.501    |
|                                                             | No        | 19.2  | 23.9   | 31.8     |          |
| Is there adequate time for preparation of examination      | Yes       | 51.9  | 58.7   | 63.6     | 0.610    |
|                                                             | No        | 48.1  | 41.3   | 36.4     |          |
| Is there any pressure performance for passing examination with high score | Yes  | 38.5  | 34.8   | 27.3     | 0.653    |
|                                                             | No        | 61.5  | 65.2   | 72.7     |          |
| Finishing basic paper in 1st year will help in concentrating on individual specialized subject later | Yes  | 88.5  | 89.1   | 63.6     | 0.014*   |
|                                                             | No        | 11.5  | 10.9   | 36.4     |          |
| Does this pattern will help to increase understanding for basic subject | Yes  | 84.6  | 93.5   | 72.7     | 0.068    |
|                                                             | No        | 15.4  | 6.5    | 27.3     |          |

*Significant difference at $P \leq 0.05$. Chi-square test. ATKT: Allowed to keep term, LD: Library dissertation
dissertation topic selection showed no statistically significant correlation between their education level and responses. However, the responses were in favor of the examination of basic sciences being conducted as a part of I MDS. Around 75% of the respondents felt that the quality of patient work will not be hampered.

The maximum of 88% of respondents chose as the advantage of finishing the basic sciences examination in I MDS will be helpful in concentrating on specialty subject and was also found to be statistically significant. Similar outcome was also found in the study conducted by by Khandelwal et al.[6] Except for this, the questions such as having performance pressure to score high, adequacy of time for preparation, and the real need to conduct examination in I year of MDS curriculum were favored. In addition, almost 84.6% of respondents felt that the conducting of examination for basic sciences in I‑year MDS itself will help them understand subject better.

Limitations
The DCI has always been at forefront to dynamically modify the PG curriculum from time to time. The dental PG education across country varies greatly on the factors like PG guide, available resources with college, etc. and that can have an impact on the perception of study participants from different institutes. The study did not assess psychological aspects of change in the curriculum which can be considered as a limitation of the study. The inclusion of varied study participants from different regions of the country including faculties might help us extrapolate the current study results to generalize them.

CONCLUSION
The present study results revealed an overall positive perception toward the change in MDS curriculum pattern, making it vital to revisit the same in coming years. In addition, owing to the importance toward the basic sciences, the fact that specialization subject and activities such as quality dental care, library dissertation, and thesis dissertation carry host of importance and should also be given priority for. Furthermore, such evaluations from time to time will reveal the reparations and gains out of such changes.

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Conflicts of interest
There are no conflicts of interest.

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