

Acceptability and Feasibility of Choice Based Credit System in BDS Syllabus

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Abstract

Purpose: To receive the opinion of dental academicians trained in pedagogy on the feasibility and acceptability of Choice Based Credit System in BDS syllabus and also to receive the opinion of students by conducting focus group discussion.

Materials and methods: A model BDS syllabus Prototype for Choice Based Credit System was designed and was submitted to a team of dental academicians trained in pedagogy for their suggestions on the acceptability and feasibility of application of Choice Based Credit System (CBCS) in dentistry through online Google form Questionnaire. Focus group discussion was conducted with a group of interns to know the opinion of the stakeholders on CBCS. The proceedings were analyzed.

Results: Participants in the Google online questionnaire majority accepted the feasibility of implementing CBCS in dentistry in India. Analysis of the conversations in Focus group discussion with interns also revealed their interest in welcoming CBCS into dental curriculum.

Conclusion: Provided the Core competencies are taken into consideration and choice is given to students to select the areas which they want to specialize to take in electives and not to leave any branch as a whole as optional elective creates possibilities to successfully implement CBCS in BDS.

Key Words: Focus group discussion; Online questionnaire; BDS syllabus; Choice based credit system; Google forms

1. Introduction:

Education as a system is open for changes to cater the needs of the society and the students. Reforms keep occurring at all the level of educational system to match the global trends. In 1926, Dr. Gies published a landmark report that established the importance of dentistry as a healing science and an essential component of higher education in the health professions as part of a series of studies on professional education in the United States funded by the Carnegie Foundation for the Advancement of Teaching.^[1]

There have been many other reports written on reforms in dental education since the Gies Report, like the one by Haden and Hendricson et al on Curriculum change in dental education, 2003–09.^[2-9] The reforms proposed in dental education are at various levels including the methods of teaching, assessment and curriculum revision. Innovative curriculum models to suit the learning styles of the web 2 generation students, newer assessment methods & tools, competency enhancing measures and Professionalism are already in the changing phase.

CBCS essentially implies a redefining of the curriculum into smaller measurable entities or ‘modules’ with the hours required for studying/‘learning’ these – not ‘teaching’ - being at the primary focus and the development of a mechanism whereby these modules can be combined in different ways so as to qualify for a Certificate, Diploma or Degree. In a sense, therefore, the completion of a single ‘Module’ of learning can pave the way for learning other modules either in the same institution or elsewhere and a combination of modules in keeping with the needs and interests of the learners illustrates the much talked about ‘cafeteria approach’ to learning with the Learner at the center stage of all academic transactions. Since CBCS will be uniform in all universities, it is beneficial for achieving more transparency and compatibility between different educational structures. The University Grants Commission of India recommends CBCS for all courses.

The main objective of this qualitative developmental action research is to obtain the opinion of dental faculty on the acceptability and feasibility of the CBCS in BDS syllabus through online Google form questionnaire and to get the opinion of students as part of stake holders on CBCS through focus group discussion.

2. Methods:

The study was exempted from Institutional Review board since it’s only an opinion survey and the individual participants and their opinions are not revealed at any point and also there is no interventional procedure. A BDS syllabus prototype was designed to fit into Choice Based Credit System.^[10] Questions were framed in Google Docs highlighting the key differences between CBCS and traditional curriculum and whether it is feasible to be applied in dentistry. The framed BDS syllabus prototype with provision for electives was sent to Dental academicians trained in pedagogy along with the link for Google Questionnaire form through E-Mail. The responses from the Google forms were analyzed and represented

as bar diagrams. Participants' opinion, apart from agreeing for the questions were categorized based on common themes for analysis and interpretation.

The freshly passed out BDS students from traditional BDS Curriculum, currently doing their Internships were explained on the details of the syllabus and a copy of the syllabus prototype was mailed to them personally. 10 Interns a blend of high, average and low achievers were involved in Focus Group Discussion on the feasibility of Choice based credit system for BDS on the next day. The Focus group discussion was conducted in a closed room in the college after taking consent from the students. The discussion was video recorded, transferred to laptop and the responses were transcribed. Apart from video recording, one more faculty acted as record keeper and took notes on the conversation happened during the discussion.

3. Results:

The Google Questionnaire was sent to dental education unit alumni of IGIDS and few dental faculty in Tamilnadu. Within 10 days of time 32 responses were recorded from the Google online questionnaire. Participants in the Google online questionnaire accepted the following statements on implementation of CBCS for BDS.

Performance of learners comparable in global standards – 78%; Flexibility to the learners in the pace of learning – 97%; Facilitate learner mobility from one university to the other – 81%; Increasing internal facilitates better learning – 78%; Grading makes it fair to the students – 94%; Motivates the learner studying topics of their choice – 91%; Continuous student learning – 81%; Time constraints on the part of faculty – 63%; Increases student accountability – 94%; Handle the content load of a subject effectively – 84%.

The general comments from the faculty were like *“If it is taken by the Educational Body (DCI) for a workshop involving faculty members National wide that might give us a more ideas about executing this system”*... *“CBCS is a system of education followed by international schools. It's right time we move along the global path”*... *“Continuous up gradation in the course content is mandatory due to the Research & Development in dentistry. No space for this in the traditional system. Hence the new system should be implemented to meet global standards”*...

3.1.1 Focus group discussion with Interns

After explanation on what is CBCS and the possibilities of its application in Dentistry, the Interns actively participated in the Focus group discussion. The student community came out with their views on the system they underwent, the pros and cons of it and also the proposed CBCS model on its advantages and drawbacks for the questions put forth by the researcher. The group wanted CBCS to be implemented in dentistry since they felt it is completely student centered. Possible ways in the change of curriculum pace based on the students capacity for slow learners on one side and chances of earning more credits by the bright students on the other end attracted the interns very much. The decision of the group was unanimously for implementation of CBCS in dentistry.

The student responses were like *“Student can work according to his capability, need not get overloaded”*... *“Credit transfer system is very useful, the student need not restart the course from the beginning”*... *“Students can be judged on similar basis in grading than marks”*... *“Anyone can easily*

become a specialist in their field of choice with the provision for electives at the level of undergraduate itself” ...

4. Discussion:

The vision of the dental schools in future should be to become “learning organizations”^[2] (Hendricson& Cohen, 2001). For the vision to happen, changes should be implemented at all levels right from adoption of curriculum to suit the Universal Standards. Adult learning principles insists involving the students in planning and implementation of the educational process. Choice based credit system involves the students in choosing subjects of their choice for electives. The flexibility of taking limited credits in the semesters based on the student capability was addressed to be the prime differentiating factor in CBCS.

The current study employed Google Doc online questionnaire for collection of data from the dental faculty on feasibility of CBCS in dentistry. Rakib U et al described the use of Google Docs in doing a questionnaire study and concluded that the main benefits of using the system come from its ease of use, wide availability, and enhanced security.^[11] Watt et al. (2002) noted that ‘using web-based evaluation questionnaires can bypass many of the bottlenecks in the evaluation system (e.g. data entry and administration) and move to a more “just in time” evaluation model’.^[12]

In the response to questionnaire, few dental academicians have raised their doubts on the faculty acceptance and cooperation for implementation of CBCS. They also have insisted on the need for faculty training to do so. This discussion supports the De Paola DP (2004) discussion in the white paper for reforms in dental education that “there is a high capacity for implementing change, where faculty and administration are comfortable with the process of innovation and discovery”.^[13] Marsha Pyle (2012) also concluded that “the future of dental education will pivot on the strength of thought leaders who have the courage to advance new ideas and the will to persevere when political forces and the will to change discourage the vision”.^[14]

The traditional BDS examination system tests certain subjects after two or three years of teaching only in which case the students don’t show involvement in the non-exam going years.^[15] This statement is reflected by the dental academicians in the response. 81% of the participants have accepted that CBCS ensures continuous learning by testing the outcomes in all semesters.

MandeepVirdi^[15] described that the major advantage of the semester/quarter system in dental education is that large subjects, such as prosthodontics, can be broken down into various parts and covered over several semesters. In the current study, 84% of the participants reflected the same opinion.

In a study by Alka et al (2014) after implementation of CBCS in Mumbai University in arts and science, only 35% of the respondents agreed that internal assessments helped improve pass percentage.^[16] In the current study 78% of the respondents agreed that increasing the internals will improve the learning of the students. In the same study, 42% of the respondents agreed that the objectives of CBCS were met, 18% were uncertain and 39% felt that the objectives were not met⁽¹⁶⁾. In the current study, except for two participants in faculty, rest of the stake holders, both the teaching fraternity and the student community welcomed the implementation of CBCS in dentistry with a positive note on the benefits overriding the few negatives associated with CBCS.

The potential disadvantages in CBCS as inferred from current study including the need for more number of faculty and the possibility student being irresponsible is supported by the study of Nil Ratan et al (2013). The author studied the attitude towards CBCS in Assam University and also inferred the same disadvantages.^[17]

The study concentrated on two of the stake holders the students and the faculty to take their opinion. The students, as one of the stakeholders were involved in few studies to give opinion on the effectiveness of curriculum.^[18-21] The significance of student opinion was emphasized that within medical education research there is a growing emphasis on the need to elicit the student voice, rather than merely reflecting the concerns and assessment criteria of those responsible for designing, delivering and evaluating the curriculum by Rosaline et al.^[22] The current study included the opinion of the students as stake holders.

Wong discussed the following issues that Focus group discussions are considered to be useful in generating a rich understanding of participant's experiences and beliefs.^[23] The current study employed focus group discussion method to take the opinion from interns on application of CBCS in dentistry. The focus group discussion was said to have a group size between six and 12 people by Wong^[23]. The current study had 10 people in discussion. The steps in analysis were discussed to be verbatim transcription of the discussion followed by comparison of the transcription with hand written notes for filling in the gaps, coding of data in the transcript into categories. The same method was followed in the current study for interpretation of data. Joanne et al discussed that the information generated in focus group would be true and valid but the knowledge will be quite specific to the context in which it is constituted.^[24]

In the previous study by ElangovanS et al^[25] and Ganesh et al^[26] the interns expressed preference to have a grading system for dental college admission rather than a ranking system. In the current study also both the faculty and students considered grading system as beneficial.

The need for a transparent system in dental undergraduate education to increase the transparency to the subject and make the students more confident about their profession to deal with the challenges of the world was already suggested by Ganesh et al (2013).^[26] Mayank et al (2015) stated that Indian dental students at an undergraduate level may need additional education and clinical training.^[27] In the current study, the interns expressed the possibility of mastering in a specialty if they were allowed to choose their own electives echoes the previous study results.

5. Limitations:

Sheeba Sharma et al (2012) stated that it was difficult to find recent references on dental education in India and the qualitative comments were purely based on their work.^[28] Similarly, in the current study too, lack of previous research in the same field limits the discussion and the result of the qualitative analysis is subjective.

The current study has several limitations which includes the Google questionnaire, which was sent to only few dentists in South India. The opinion may vary if it is taken on a large scale. The Focus group discussion was carried out with students representing high, moderate and low achievers but not on the entire BDS student community. Hence it is limited by the issues of range, depth, and candor of discussion.^[29] The study confines the result of the study to local settings and leave the decision to readers as confirmed in their

systematic review by Beckman & Cook^[30]. Lack of prior work in dentistry in relation to CBCS, limits detailed discussion of the study.

6. Conclusion:

Choice based credit system has become the need of the hour since it suits the global trends and develop a strong grading system that reflects the performance of the learners. It helps in providing learners to choose in their curriculum & respects learner autonomy - Cafeteria approach. It also promotes course equivalency and learners mobility. As William Osler said, “The future belongs to people who see possibilities before they become obvious.” Thus this study is an attempt to visualize the possibilities in BDS syllabus to suit CBCS before it becomes obvious. Within the limitations of the study, provided the Core competencies are taken into consideration and choice is given to students to select the areas which they want to specialize to take in electives and not to leave any branch as a whole as optional elective creates possibilities to successfully implement CBCS in BDS.

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