Student's Opinion Towards the Assessment System of Revised Undergraduate Medical Curriculum - An Experience in A Private Medical College

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Summary:

Objectives: The aim of the study was to assess the attitude of the undergraduate medical students towards the assessment system of revised medical curriculum.

Materials and Methods: Study design: It was a -descriptive cross sectional study. Study period: From February 2008 to April 2008.

Setting: Department of Obstetrics and Gynaecology in Holy Family Red Crescent Medical College and Hospital.

Sample size: Total 82 students were selected for the study out of which 70 participated.

Inclusion criteria: students who were selected for the final MBBS examination.

Exclusion Criteria: Students not qualified for final professional examination.

Procedure: During the placement of the students in the department of Obstetrics and Gynaecology, the basic idea of the old and the new curriculum was explained to them. The objective of the study was explained and a pretested questionnaire was given to each student. Identification of

Introduction:

Many leading medical schools in the world have extensively revised their respective course curriculum to prepare 'Today's Medical Students' to become 'Tomorrow's Doctors'. Medical curricula need to be defined in accordance to the needs of specific communities. Skills and attitude components have recently started receiving such attention in curricula.

The concern is growing that the teaching and assessment of clinical skills lacks uniformity and that the skills of

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the student was not compulsory to maintain secrecy. 5 point Likert scales was used to measure the responses of the participants. Statistical analysis was done using the SPSS system version 11.

Results: Out of 82 students, 70 participated. Among them, 37.1% were male, and 48.6% were female students. 44.2% said that the curriculum and 35.7% said that the exam system is easy to follow, 47.1% wanted to have single subject and 65.7% wanted to have all the major subjects simultaneously in block posting. 74.1% said that the 6 hours learning period is tiring. 42.9% were in favour of 3-6 pm break, 64.3% were in favour of giving MOCK test weekly, 55.7% liked formative assessment test, 64.3% did not adopt any unfair means in the examination, 78.6% students are comfortable with MCQ,81.4% with SAQ, about 41.5% with SEQ, 74.2% with OSPE, 71.5% with SOE and 77.2% liked Clinical examination.

Key Words: Under graduate medical Curriculum, Students opinion.

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the medical graduates are far from expectations of the stake holders ². A number of cross-cultural studies have looked closely at the study approaches using Biggs' Study Process Questionnaire (SPQ) in various countries worldwide including Asia.

Study has been done using revised version of the questionnaire (R-SPQ-2F) among the Pakistani students in tertiary institutions³. But the scenario is a little different in our settings. After the adoption of the new curriculum in the medical colleges all over the country, students have become frustrated and worried⁴. In the new system, every professional examination will be held two times in a year after six months. In this system, pass marks has been fixed at sixty per cent. Since the Faculty of medicine has gone through a successful revolution in launching the new MBBS curriculum in 2002, now on the verge of final professional examination, few opinions has arisen from the final year students regarding their adaptation with the curriculum.

With that point in mind this study has been done to assess their opinion about it.

Objectives of the study:

- The aim of the study was to know the opinion of the undergraduate medical students towards the assessment system of revised medical curriculum.
- To analyze the student's evaluation and implementation of the idea to overcome the shortcomings of teaching curriculum.

Materials and Methods:

Study design: It was a descriptive cross sectional study. Study period: From February 2008 to May 2008. Setting: Department of Obstetrics and Gynaecology in Holy Family Red Crescent Medical College and Hospital. Sample size: Total 82 students of were selected for the study out of which 70 participated. Inclusion criteria: Students who were selected for the final MBBS exam. Exclusion Criteria: Students ineligible for the final professional examination. Procedure: A total of 70 students participated in the study. During the placement of the students in the department of Obstetrics and Gynaecology, the basic idea of the old and the new curriculum was explained to them. Students were

informed of the role that their feedback plays an important role in changing the curriculum. The objective of the study was explained and a pretested questionnaire was given to each of them. Identification of the student was not compulsory for privacy issue. At the end of the placement, students filled up the questionnaire to give their opinion regarding the curriculum and also their attitude towards it. The questionnaire consisted of 14 statements. The respondents had to indicate their degree of agreement with the individual statements using a 5 point Likert scale. Statistical analysis was done using the SPSS system version 11.

Result:

 Table-I

 Distribution of the respondents as per their Gender.

Gender	Frequency	%
Male	26	37.1
Female	34	48.6
Total	60	85.7
Missing System	10	14.3
Grand total	70	100.0

Table-II

Distribution of the respondents according to different aspects of revised curriculum. $(n=70)$									
Different events	Level of opinions								
of revised curriculum		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total	Missing System	Grand Total
Simplicity of	F	2	9	18	26	5	60	10	70
Present curriculum	%	2.9	12.9	25.7	37.1	7.1	85.7	14.3	100
Simplicity of Examination system	F %	3 4.3	15 21.4	17 24.3	22 31.4	3 4.3	60 85.7	10 14.3	70 100
Block posting in 1 subject per rotation is help full for learning	F %	8 11.4	13 18.6	6 8.6	28 40	5 7.1	60 85.7	10 14.3	70 100
Bl. posting should contain all the major subjects in single rotation	F %	5 7.1	5 7.1	3 4.3	36 51.4	10 14.3	59 84.3	11 15.7	70 100
Learning hours	F %	4 5.7	1 1.4	3 4.3	8 11.4	44 62.9	60 85.7	10 14.3	70 100
3-6 pm break will be better for learning	F %	10 14.3	13 18.6	7 10	16 22.9	14 20	60 85.7	10 14.3	70 100

^{*} F- Frequency, % = Percentage.

Table-IIIDistribution of the respondents according to different aspects of examination system. (n=70).

		Weekly	Twice a month	Once a month	Total	Missing system
Frequency of taking mock tests	F	45	12	3	60	10
	%	64.3	17.1	4.3	85.7	14.3
		yes	no			
Liking of formative assessment examination	F	39	16		55	15
•	%	55.7	22.9		78.6	21.4
Adoption of any unfair means in the exam	F	3	45		48	22
	%	4.3	64.3		68.6	31.4
Saw others to do the same	F	21	34		55	15
	%	30.0	48.6		78.6	21.4
Having sufficient time for study	F	8	51		59	11
•	%	11.4	72.9		84.3	15.7

^{*} F- Frequency, % = Percentage

Table-IVDistribution of the respondents as per comfortableness in different type of assessment examination (n=70).

Type of examination		Degree of comfortableness							
		Highly comfortable	Comfortable	Mildly Comfortable	Not Comfortable	Don't know	Total	Missing System	
MCQ.	F	30	18	7	5	0	60	10	
	%	42.9	25.7	10.0	7.1		85.7	14.3	
SAQ.	F %	16 22.9	33 47.1	8 11.4	3 4.3		60 85.7	10 14.3	
SEQ	F %		13 18.6	16 22.9	29 41.4	1 1.4	59 84.3	11 15.7	
OSPE.	F %	11 15.7	26 37.1	15 21.4	6 8.6	1 1.4	59 84.3	11 15.7	
SOE	F %	4 5.7	23 32.9	23 32.9	3 4.3	5 7.1	58 82.9	12 17.1	
Clinical examination	F %	13 18.6	25 35.7	16 22.9	4 5.7	2 2.9	60 85.7	10 14.3	

^{*} F- Frequency, % = Percentage

MCQ-Multiple Choice Question, SAQ-Short Answer Question, SEQ- Structured Essay Question,

OSPE-Objective Structured Practical Examination, SOE-Structured Oral Examination.

Table I shows the gender distribution among the students. Out of 82 students, 70 participated. Among them, 37.1% (26) were male student, and 48.6% (34) were female student. 10 respondents did not mention their gender and mentioned as missing system.

Table-II shows the distribution of the respondents according to different aspects of revised curriculum. Regarding simplicity of the curriculum, 37.1 % (26) agreed that the curriculum is easy to follow, 25.7% (18) neither agreed nor disagreed to the question. 7.1 % (5) agreed strongly and 12.9 % (9) disagreed.

Out of 70 students, 31.4 % (22) agreed that the examination system is easy to follow. 24.3 % (17) respondents neither agreed nor disagreed to the question. 21.4 % (15) Disagreed, Strongly disagreed 4.3 % (3) & the same percentage strongly agreed.

Again, 40 % (28) respondents agreed that the block posting in one subject at a time per rotation is effective for learning.8.6 % (6) respondents neither agreed nor disagreed. 11.4 % (8) strongly disagreed, 7.1% (5) strongly agreed & disagreed 18.6 % (13).

Among the same respondents, 51.4 % (36) agreed that block posting should contain all the major subjects simultaneously per rotation. Strongly agreed 14.3 % (10), strongly disagreed 7.1 % (5), same proportion disagreed & 4.3 % (3) neither agreed nor disagreed.

Out of 70 students, 62.9 % (44) respondents strongly agreed that the 6 hours learning period is tiring. 4.3% (3) respondents neither agreed nor disagreed to the question. 11.4 % (8) agreed, 1.4% (1) disagreed and 5.7 % (4) strongly disagreed to the question.

Regarding the break time, 20 % (14) respondents strongly agreed that the 3-6 pm break will be better for learning eventually. 14.3 % (10) disagreed strongly. 18.6% (13) disagreed, 22.9 % (16) agreed & 10 % (7) respondents neither agreed nor disagreed to the question.

Table III shows the opinion of the students about various aspects of the examination system. 64.3 % (45) students were in favour of giving MOCK test weekly, 17.1% (12) were in favour of twice a month and 4.3 % (3), once a month.

Again, 55.7 % (39) respondents were in favour of giving formative assessment test, 22.9 % (16) in favour of summative test. 15 students did not make any comment on this.

Regarding adoption of unfair means in the examination, 64.3 % (45) students did not do so, 4.3 % (3) adopted, 30 % (21) saw others to do and 48.6 % (34) did not see any one to do so. 22 students did not give any comment on the former part & 15 in the following part of this question.

Out of 70 students, 72.9 % (51) expressed that they did not get sufficient time for study themselves during block posting. 11.4% (8) student got time for study for their own.

Table IV revealed the comfortableness with the examination, 42.9 % (30) students are highly comfortable

with MCQ, 25.6 % (18) are comfortable, mildly comfortable 10% (7) & not comfortable are 7.1% (5).

About SAQ, 22.9 % (16) are highly comfortable, 47.1% (33) are comfortable, 11.4% (8) are mildly comfortable and 4.3% (3) are not comfortable.

As with SEQ, 18.6% (13) are comfortable, 22.9% (16) mildly comfortable, 41.4% (29) not comfortable. 1.4% (1) did not comment on this.

Regarding OSPE, 37.1 % (26) are comfortable, highly comfortable & mildly comfortable are 15.7% (11) & 21.4% (15) respectively, 8.6 % (6) not comfortable 1.4 % (1) did not give any opinion.

About SOE, 32.9 % (23) are comfortable with it, same percentage is mildly comfortable, 5.7 % (4) are highly comfortable, and 7.1% (5) do not know about this. 17.1% (12) did not give any opinion.

As with Clinical examinations, 35.7 % (25) are comfortable with it, 18.6 % (13) are highly comfortable, 22.9% (16) are mildly comfortable, not comfortable 5.7% (4) & did not know about it are 2.9% (2).

All parameters were statistically analyzed by T test by SPSS package system version 11.

Discussion:

Student's evaluation of any teaching curriculum is a firmly recommended part of the teaching-learning process and is aimed at achieving the desired objectives. The concept of "adult learner" in the teaching-learning process further authenticates the utility of a feedback from students to evaluate teaching curriculum. However, it also has to be remembered that such an exercise is useful only if the student's evaluation is analyzed and implemented to further overcome the shortcomings of teaching curriculum⁵. The students overall, had a positive opinion regarding the newly implemented curriculum in MBBS. The recent change of the curriculum was done to make the knowledge more practically applicable for the benefit of the patient. Since the curriculum is new for both the teachers and the students, implementation of it was a little bit difficult. But the result of the study revealed the positive reception of most medical students to it. Likert scale grading was more than 3 in majority of the questions (Q.1 to 6). But there are some issues regarding the flaws of the system. According to the new syllabus, first professional examination will be held after eighteen months, second professional after two years from the earlier professional examination and third professional will be held after eighteen months from the second professional examination. In the new system, every professional examination will be held two times in a year after six months. In this system, pass marks has been fixed at sixty per cent⁴. So the failed student will fall behind for six months from his batch mates and he will be treated as an irregular candidate in the next examination. In this process, this is not clear where the unsuccessful student would be placed? The authorities have not yet decided which batch they would belong to. So this problem should be properly addressed, evaluated and solved. As the new curriculum is implicated from 1st year, the new batches do

not face much problem to follow this. There are pros and cons of each system. In the field of medical education, new trends are emerging in teaching and learning as well as in assessment of students ⁶. More emphasis is now being placed on the learning outcomes and its integration with the curriculum. Students are now required to possess a breadth of skills - abilities, adaptabilities, problem solving talents, creativity and communication skills - all the necessary competencies to be a professional⁷.

Conclusion:

The overall impact of the system is effective, practical and student friendly which have the potentiality of fulfilling the criteria to create a professional medical person. The findings have important implications for curriculum development and review regarding the implementation and conduct of strategies for reflection, and the impact on student learning. The development and delivery of an undergraduate medical curriculum is a far-

reaching and complex system with many stakeholders. Of these stakeholders, no group better understands the intricacies or is better equipped to comment on the strengths and weaknesses of a program than its students ⁸. A study from the United Kingdom ⁹ observed that when medical students were instructed on methods of providing feedback (through exercises of reflection and discussion), they were more confident in the feedback they were able to provide and could attribute it to this newly learned skill set. An important first step in soliciting meaningful and constructive feedback is "student empowerment" ¹⁰-

¹¹. Students must be informed of the role that their feedback plays in changing the curriculum. It will be fair to say that many issues remain unresolved, but students' opinion must not be ignored and the information that has been gathered here should contribute to the GMC's consultations before any policy changes are implemented ¹². Problem-based learning (PBL) has been acknowledged as a method that enhances integration of learning, self-directed learning and provides relevance and context to the subject. It is also used to prepare students for professional life as physicians ¹³. The use of

PBL has been reported from several medical colleges ¹³-¹⁵. To overcome some of the shortcomings of a purely PBL curriculum some schools in New Zealand, have used a hybrid system in their preclinical curriculum ¹⁵. The programme used newer educational methods within a conventional curriculum ¹⁶. So there should always be an option for a versatile method of assessment system in curriculum of medical education. Groups of faculty experts identified specific desired outcomes, referred to as "standards," for each competency 17. A modified Delphi approach was used to engage these groups of experts to define the developmentally appropriate standards for each competency at the ends of year one and year two and at graduation (year five) ¹⁸. Medical education has revolutionized through the years to reach perfectness in curriculum making and assessment system. And student opinion plays a very important role in it.

Recommendations:

The overall system is very student friendly and practical. But there are some pitfalls which could be overcome very easily. Since the system is implimented for the best benefit of the students, learning hours and the break time can be rearranged specially during the block placements. Students should have some time of there own for preparing themselves for examinations. Another point can also be mentioned that they should cover the major subjects concurrently in the rotation during their block placements. Usually they are placed rotation wise in a single subject at a time in their block placement. Mostly the problem of such arrangement was that, by the time they complete their present placement they forget the learning from the previous one. At least 4 classes (3 recapitulation classes and 1 review class) of other subjects beside the main subject

will help them to remember their learning. More assessments of the system will reveal the competency of it for the fulfilment of the criteria.

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References:

- Boud D. and. Feletti G, London/Stirling (USA): Kogan Page Ltd, Taking Medical Education into the New Millennium: Implementing Problem-based Learning (PBL) in the Faculty of Medicine by the Dean & Members of PBL Committee Faculty of Medicine Jul 1999 Vol. 3 No. 2.
- Rashida A, Naqvil Z & Wolfhagen I; Psychomotor Skills for the Undergraduate Medical Curriculum in a Developing Country—Pakistan 1 Aga Khan University, Karachi, Pakistan, and 2 Maastricht University, Maastricht, The Netherlands.
- Siddiqui, Zarrin S; Study Approaches of Students in Pakistan: The Revised Two-factor Study Process Questionnaire Experience.
- Arif Bulbon S; Medical students worried over curriculum change: Mon, 31 Oct 2005, 11:16:00 New Nation Online Edition. Copyright 2003 by ittefaq.com.
- Tyagi A. Ahuja, S. Bhattacharya A. Undergraduate medical students assessment of teaching curriculum – A cross sectional study. 186 Indian Journal of Anaesthesia, June 2002.
- Newble D.I. ASME, Medical Education Booklet No.25.
 Assessing clinical competency at the undergraduate level.
 Association for the study of Medical Education. Dundee,
 Scotland, 1992.
- ROUF S, MAJID A: Performance of Postgraduate students in Objective Structured Practical Examination (OSPE) in the Speciality of Obstetrics and Gynaecology .Journal of Bangladesh College of Physicians and Surgeons. Vol. 25, No. 1, January 2007.

- 8. David C, Dorothy T, Elizabeth A, Undergraduate Medical Education Curriculum Renewal. Student Responsibility for the Curriculum. November, 2009; Dalhousi University, Faculty of medicine.
- Hammond, A., Collins, S., Booth, J., & Kalia, S. (2009).
 Learning from evaluation: A descriptive, student-informed approach. *The Clinical Teacher*, 6, 73 78.
- Abrahams, M.B., & Friedman, C.P. (1996). Preclinical courseevaluation methods at U.S. and Canadian medical schools. Academic Medicine, 71, 371 – 374.
- Griffin, A., & Cook, V. (2009). Acting on evaluation: Twelve tips from a national conference on student evaluations. Medical Teacher, 31, 101 – 104.
- Kamran Z Khan, John W Sear, Downloaded from pmj.bmj.com on September 2, 2010 - Published by group.bmj.com.
- Antepohl W, Domeij E, Forsberg P, Ludvigsson J. A followup of medical graduates of a problem-based learning curriculum. *Med Educ* 2003;37:155–62.
- Ghosh S, Dawka V. Combination of didactic lecture with problem-based learning sessions in physiology teaching in a developing medical college in Nepal. Adv Physiol Educ 2000; 24:8–12.
- Bhattacharya N, Shankar N, Khaliq F, Rajesh CS, Tandon OP. Introducing problem-based learning in physiology in the conventional Indian medical curriculum. *Natl Med J India* 2005;18:92–5.
- VYAS r., et al. An effective integrated learning programme in the first year of the medical course the national medical journal of india 2008; 21:.21-26.
- Carraccio C, Wolfsthal SD, Englander R, Ferentz K, Martin C. Shifting paradigms: Educational Strategies 500 Academic Medicine, Vol. 82, No. 5 / May 2007 from Flexner to competencies. Acad Med. 2002;77:361–367.
- Elaine F. Dannefer, and Lindsey C. Henson, The Portfolio Approach to Competency-Based Assessment at the Cleveland Clinic Lerner College of Medicine. Educational Strategies 498 Academic Medicine, Vol. 82, No. 5 / May 2007.