

ATTITUDES OF MEDICAL STUDENTS TOWARDS IAP PEDIATRIC QUIZ

Manorama Verma
Tejinder Singh

ABSTRACT

Attitudes of medical students towards IAP Pediatrics Quiz were assessed, using a 5 point pre-tested, standardized Likert type scale, developed in our own department. Students had a favorable attitude towards the Quiz and felt that it helps them in the study of Pediatrics, but they are not able to devote sufficient time for preparations because of their preoccupation with other major subjects.

The attitudes demonstrated a decline towards unfavorableness when comparison was made between the scores of third year and final year medical students. The difference was statistically significant ($p < 0.05$).

It is suggested that the timing of the Quiz should be changed, so that it doesn't coincide with final professional examinations. This will make it more popular besides generating interest of medical students in Pediatrics. Giving more weightage to Pediatrics in university examinations is also re-emphasized as a means of making students more interested in pediatrics.

Key words: Pediatric education, Pediatric quiz, attitude assessment, Likert scale.

From the Department of Pediatrics, Christian Medical College, Ludhiana.

Reprint requests: Dr. Manorama Verma, Professor and Head of Pediatrics, Christian Medical College, Ludhiana 141 008.

In India, Pediatrics has been accorded the status of a separate subject in a few universities only. In some, it is examined as a part of medicine while in a great number of universities, there is no examination at all in Pediatrics(1). A majority of the medical students, thus, have no motivation for studying Pediatrics.

In an attempt to generate the undergraduate students' interest towards Pediatrics, the Indian Academy of Pediatrics started a yearly Pediatric Quiz in 1987. In addition to the recognition that it provides to the winning students, a monetary incentive had also been provided.

Contrary to the expectations, we, at the Christian Medical College, Ludhiana (CMCL) have been finding that the Quiz is not serving the requisite purpose. In our institution (with an intake of 50 admissions every year), 65 students took the preliminary screening test in 1987. The number gradually declined to the extent that in 1991, only 12 students took the test. Further, during the last five years our teams reached thrice in the zonal rounds and once in the National round but none of the winning students have opted for Pediatrics as a career. This had been a cause for concern and prompted us to evaluate the Pediatric Quiz with a view to make it more effective. Hamblin(2) has suggested that the first phase of evaluation for any programme should be at the 'Reactions' level, for if the participants are not favorably disposed towards it, the desired results may not be obtained.

The present communication describes the attitudes of medical students towards the Pediatric Quiz and then analyses them to find a suitable action plan, which can be implemented to generate and sustain

students's interest in Pediatric Quiz and indirectly in Pediatrics.

Material and Methods

The attitudes were assessed by means of a Likert type scale, containing 12 affirmative statements, to which respondents indicated their agreement or disagreement on 5 points—strongly agree, agree, can't say, disagree and strongly disagree. The scale was developed in our own Department. Its reliability was tested on a representative sample of 10 students by Split-half method, product-moment co-efficient of correlation and Spearman Brown prophecy formula(3). Reliability of the scale was 0.78, with a level of significance of 0.01. These students were excluded from the final analysis.

The scale was administered to third year (n=26), fourth year (n=36) and final year (n=23) students. They were explained the purpose of the study and requested to give frank and fair opinion. Strict anonymity was maintained.

The positive statements on the scale were graded as 5, 4, 3, 2 and 1 while the negative statements were graded in a reverse order. The mean scores and total score were calculated and comparisons were made between the 3 groups. A score of 3 indicated a neutral attitude while scores less and more than this indicated a negative and positive attitude, respectively.

In addition to the above scale, the students were also requested to suggest any alternative activity, which can help in generating interest towards Pediatrics. In case, they were not participating in this year's quiz, they were requested to give reasons for not doing so.

Results

The attitudes of medical students towards Pediatric Quiz have been depicted in

Table I. In general, the students have a neutral or only a marginally positive attitude towards the Quiz (mean rating 3.1). When the responses are analyzed according to the class, it becomes obvious that attitudes change from a positive one in third year students to a negative one in final year students. This difference is statistically significant ($p < 0.05$).

Item wise analysis of the ratings confirm to the above pattern and for most of the statements, attitudes demonstrate the common pattern of going towards negative side in final year students.

Table II gives the alternative activities suggested by the students to replace pediatric Quiz while the perceived reasons for not participating in the Quiz have been given in *Table III*.

Discussion

Attitudes have a very strong influence on the behavior of a person(4). More than knowledge, the behavior is shaped by attitudes. By definition, attitudes represent learned predisposition to react favorably or unfavorably(5). Thus, a student may know about the importance of pediatrics in his later practice yet may not devote adequate time for studying it due to unfavorable attitudes. Attitudes are formed and reformed by a variety of factors(4).

The present study was an attempt to assess the attitudes of medical students towards the Quiz. This was on the assumption that they are unfavorably disposed towards the Quiz and are, therefore, not participating in it.

There has been a favorable response to the statement that Quiz provides an opportunity for studying pediatrics. Same is true of the statement that it breaks monotonous routine of studies and that it allows study from a different perspective. It is interest-

TABLE I—The Mean Attitudes (Max score 5.0)

Sl. No.	Statement	Total Group (n=85)	Third year (n=26)	Fourth year (n=36)	Final year (n=23)
1.	The Quiz provides an opportunity for studying pediatrics	3.6	4.2	3.6	3.1
2.	The Quiz has become too stereotyped to generate any interest	3.1	3.3	2.8	3.4
3.	The Quiz breaks the monotonous routine of studies by providing a different approach for studies	3.6	4.1	3.5	3.2
4.	The Quiz demands a lot of time, which will interfere with my study of other major subjects	2.6	3.0	2.8	2.2
5.	The Quiz provides an opportunity to compare my knowledge with my peers	3.4	3.9	3.3	3.1
6.	The Quiz has failed to arouse any interest in Pediatrics	3.4	3.9	3.4	3.1
7.	The element of healthy competition stimulates me to study from a different perspective	3.5	3.9	3.6	3.1
8.	Preparing for the Quiz is simply a waste of time	3.4	3.9	3.8	2.7
9.	By participating (and probably winning) I stand a better chance of getting PG in Pediatrics	2.7	2.7	2.8	2.8
10.	There is no point of wasting precious time just to win Rs 8000/-	3.8	3.7	4.1	3.8
11.	The Quiz should be replaced by some other activity related to Pediatrics so that more interest is generated	2.6	2.6	2.9	2.4
12.	Preparing for Final professional examination is more important for me than winning at the Quiz	2.2	2.9	2.3	1.6
Total Attitude Score (Mean \pm SD)		3.1 \pm 1.1	3.5 \pm 1.4 (a)	3.2 \pm 0.9 (b)	2.8 \pm 0.3 (c)

Significant: a vs b $p > 0.05$ NS
a vs c $p < 0.05$
b vs c $p < 0.05$

TABLE II—*Alternative Activities Suggested by the Students*

Activity	No.	Suggesting
Debates	27	(31.7)
Written tests	17	(20.0)
Essay competition	11	(12.9)
'Just-a-minute'	4	(4.7)

Figures in parentheses are percentages.

TABLE III—*Reasons Stated by the Students for not Participating in the Quiz.*

Activity	No.	Suggesting
Too busy with final examinations	51	(60.0)
Lack of time	14	(16.4)
Lack of interest	9	(10.5)

Figures in parentheses are percentages.

ing that as one moves from 3rd year to final year students, the attitude score keeps on declining.

The other aspect, about which the attitudes were assessed is the amount of time that a student can afford to devote to this activity. This was tested by statements No. 4, 8, 10 and 12. The responses obtained are identical for statements 4 and 12 and also for statements 8 and 10. The students don't feel that preparing for Quiz is a waste of time but they do feel that it demands a lot of time which will interfere with their study of other subjects and specifically, for the preparations of final professional examination. Final year students have a strongly unfavorable attitude specifically on this point.

Statements 2 and 6 test the attitudes

regarding Quiz's ability to generate interest in Pediatrics. They don't feel that quiz has become too stereotyped or that it has not been able to generate interest. They are also favorable on the point that quiz provides them an opportunity to compare their knowledge with their peers.

Statement II was included with the assumption that students are fed up with the present format of the Quiz and need a change. The ratings, however, do not support this contention, indicating that most of them want the Quiz to stay on.

The students were also asked to state the perceived reasons for not participating in the quiz. Most of them stated non-availability of time due to pre-occupation with other subjects. Some also felt that the quiz is too close to their final professional examinations, making difficult for them to participate.

Regarding alternative activities, most of them said they will like the quiz to stay on. Others suggested activities like debate, written tests and 'Just-a-minute' to replace the Quiz. However, most students favored the Quiz.

Certain points emerge from these results. The medical students are in favor of a Pediatric Quiz and find it useful for study of Pediatrics. They are not yet fed up with the quiz and will like it to stay on. Despite these positive attitudes, they do not participate in the quiz because of 2 simple reasons that they can't afford to spend that much time for preparation and secondly that preparing for final professional examinations is more important for them. These feelings became more strong as they move from 3rd to final year.

Based on these findings, we will like to suggest that the timing of the quiz needs to be changed. It is mainly the final year students who stand a good chance of making

it to the semi-finals or finals which correspond with final professional examinations, which are held in December at most places. To that extent, we will even suggest reverting back the conference to October so that students can afford to invest time in Pediatric Quiz.

In a study conducted by Rath(6) among interns, it was found that most of them wanted to learn about common pediatric problems. It was also found that most of them did increase their knowledge after completing internship in Pediatrics. We would like to link our findings to this study. As third year students, they show interest in Pediatrics, which goes on declining as they reach final year. As interns, they again start showing interest in Pediatrics. Based on Thorndike's law of effects(7), it would be prudent to re-emphasize that giving adequate weightage, preferably as a separate subject, to Pediatrics in university examinations will go a long way in generating students' interest in Pediatrics.

Another point which deserves mention is the contents of the quiz. Although the students have not expressed this opinion but we feel that the questions asked at the quiz should be limited to common pediatric problems rather than going to rarer syndromes. After all, our objective is to generate interest of the masses (*i.e.*, all undergraduates) and not produce a few super-specialists in Pediatrics. It may not be out of place to mention again here that since

1987, none of our winning students has opted for pediatrics as a career.

To conclude, we make the following suggestions:

(a) The quiz should be continued in the present format; (b) The timing of the quiz should be changed so that it does not coincide with final MBBS examinations; (c) Adequate weightage should be given to the Pediatrics in university examinations; and (d) The questions should pertain more to common clinical problems rather than to rare syndromes.

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