

Teaching learning intervention of motivation by close supervision to low performance students of 2nd M.B.,B.S.(1/2005 batch) of University of Medicine 2, Yangon

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Thirty repeater-students from second year M.B., B.S. (1/2005 batch) were taken as low-performance students and they were divided into research and control groups of 15 students each. Fifteen students from research group were divided into three sub-groups of five students each. Each sub-group was undertaken in teaching learning intervention (remedial educational intervention), run by senior teachers from Anatomy, Physiology and Biochemistry, Department of University of Medicine 2, Yangon. The students from the research group were closely supervised on their academic difficulties, solved their extracurricular problems throughout the whole academic year. In the final examination, out of 15 research students, six students clearly passed the examination. Five students failed either in one or two subjects. They had the chance to sit the supplementary examination and they all passed the supplementary examination. Four students failed in all subjects. Therefore, out of fifteen research students, eleven students (73.3%) passed and four students (26.7%) failed in the final examination. In the control group, only two students clearly passed the examination. Seven students passed after the supplementary examination. Six students failed in all subjects. Therefore, in the control group, nine students (60%) passed and six students (40%) failed in the examination.

INTRODUCTION

There are many causes and problems which lead to failure in the medical education. Personal interest in medical subject is the personal factor which influences the medical student's characteristic. The social and financial problems are among the many problems which cause failure in final examination. The repeater students usually have difficulties or problems. They are also called slow learners, backward students, non-motivated students or low performance students [1]. Therefore, motivation to the repeater students may be very important and essential.

The stresses of medical education may be the information overload, long duration of

study, less time to interact with friends and family, repeated examinations/ tests, relocation and personal issues, weakness in English, poor academic performance, unexpected absence and irregular attendance, financial pressure, physical disturbances, alcohol and other substance abuse, withdrawal from outside activities, peers and family members, arguments, frights and behavioral excesses and mental disruptions [2]. The most prevalent source of academic stress was the test or examination [3]. Medical education can be a stressful experience. Competition seems to be more the style than cooperation among health professionals [4].

The causes of academic failure were widespread and ranged from deficient study

skills to financial, domestic and emotional problems. Provision of individually tailored remedial teaching is labourious, intensive and requires full faculty support [5]. Other motivations, such as social gains, financial benefits or family wish, were related to lower performance. Students motivated by the presence of chronic ill health in their families performed significantly lower. Social factors also play a role in medical students' performance [6]. Motives for choosing medicine were categorized into three indexes: 'people orientated', 'status/security orientated' and 'natural science orientated' motives. 'Person orientated' and 'natural science orientated' motives exerted the strongest influence on preferences and person orientated motives are most important for becoming a doctor [7]. The slow learner is the student formally diagnosed as "learning-disabled" by specialists in child psychology [8]. To motivate students, the teacher needs self-motivation. The teacher should also realize that motivation once established is never permanent and may require periodic 'booster' dose to build up the levels again to desirable plane.

The objective of this study was to improve the students' performance so as to pass final examination. At the end of the intervention, the students should attend the class regularly; should get passed marks in all the class tests and should significantly increase in confidence in studying Anatomy, Physiology and Biochemistry subjects.

MATERIALS AND METHODS

The students who took part in the study were altogether 30 repeater-students of second year M.B.,B.S. (1/2005 batch) students of University of Medicine 2, Yangon. Study period is the academic year 2005 - 2006.

The repeater-students were taken as low-performance students. The procedure of the research was explained to all the repeater-students. The control and research groups

were divided according to their informed consents. Fifteen repeater-students were assigned as research group and fifteen repeater-students were assigned as control group.

All these thirty students (both research & control group) had to attend the regular lecture classes, tutorial classes, practical classes and demonstration classes together with other regular second year students in all three subjects according to the respective teaching days. They also had to sit the completion class tests and final examination as other regular second year M.B.,B.S. students.

Fifteen students in research group were undertaken in remedial educational intervention run by senior teachers from three departments. The remedial educational intervention consisted of academic part and personal affair solving part. For academic part, fifteen students in research group had to attend the extra-tutorial classes, do extra assignments group discussion, MCQ exposure classes, MSQ and essay type questions discussion on respective teaching day of three subjects. All these attendance and individual attention were recorded for each student.

For personal affair solving part, fifteen students in research group were subdivided into three groups of 5 students each. Each five students were closely supervised by senior teachers from each department. Their personal histories were taken. They were interviewed with the semi-structured questionnaires (Table 1). Problems were listed (Table 2). The remedial programmed teachers were responsible for monitoring academic progress throughout the course and also closely supervised and solved personal affair problems and difficulties as feasible. Professors and Heads of the respective Departments were available for individual confidential pastoral support. Their class attendance and students performance were reported to the Rector and Pro-rector of the University.

Table 1. Semi-structured questionnaires for research group

No.	Questions	Yes	%	No	%
1	Do you attend lecture/tutorial /demonstration class regularly?	7	46.7	8	53.3
2	Do you have interest in Anatomy subject?	12	80	3	20
3	Do you have interest in Physiology subject?	11	73.3	4	26.7
4	Do you have interest in Biochemistry subject?	10	66.7	5	33.3
5	Do you enjoy this 2nd M.B.B.S course?	14	93.3	1	6.7
6	Do you understand the lectures?	5	33.3	10	66.7
7	Do you study alone?	13	86.7	2	13.3
8	Do you study with friends?	2	13.3	13	86.7
9	Do you have complete set of handouts/ practical manual, etc?	14	93.3	1	6.7
10	Do you have any problem attending the course?	0	0	15	100
11	Were the marks you got last year representative of your performance?	15	100	0	0
12	Do you have enough financial support?	14	93.7	1	6.7
13	Do you have any health problem?	15	100	0	0
14	Are you married or single?	1	6.7	14	93.3
15	How many members in your family?				
16	Who is the favorite one in your family?				
17	What is your hobby?				
18	Who support you to attend the medical course?				

Table 2. Problems list

No.	Problems	Number of students	%
1	Academic difficulties	10	66.7
2	Family problems	3	20
3	Financial problems	1	6.7
4	Interest in extra-curriculum such as sport (foot ball), TV games	3	20
5	Frequently going back to home at district	2	13.3
6	Marital problem	1	6.7

RESULTS

Regarding the class attendance, the repeater students were naturally uninterested in attending the lecture, tutorial and demonstration classes. However, as they were explained the benefit of the classes and were encouraged to attend the classes, so their

class attendance attained at least seventy-five percent. Total class-test marks carried 30% of the final examination marks as class work performance. Class work performance in research group had the average of 12.3 in Anatomy subject, 10.5 in Physiology subject and 11.6 in Biochemistry subject. Class work performance in control group had the average of 8.7 in Anatomy subject, 7.9 in Physiology subject and 8.9 in Biochemistry subject. There was significant difference between the control and research group in class work performance (Table 3).

Table 3. Class test performance of research and control group

No.	Anatomy		Physiology		Biochemistry	
	out of 30 marks		out of 30 marks		out of 30 marks	
	R	C	R	C	R	C
1	19	11	16	6	13	12
2	11	10	10	7	11	8
3	10	3	10	3	7	9
4	13	8	11	5	11	6
5	17	11	12	10	14	10
6	12	10	15	13	15	10
7	15	12	6	13	17	11
8	15	13	12	12	14	13
9	5	6	7	12	11	9
10	14	2	14	2	11	5
11	11	15	8	3	12	4
12	8	8	6	5	8	10
13	8	8	10	14	8	12
14	10	5	9	8	7	7
15	17	11	12	6	15	12

R = Research, C = Control

The whole second M.B.,B.S. students including repeater students were assessed by final examination. Out of thirty repeater students (both control and research group), altogether 8 students (2 control & 6 research) got clear passed result, 12 students (7 control & 5 research) failed and had to sit the supplementary examination after 6 weeks of intensive revision course. All these 12 students passed in the supplementary examination. Therefore, altogether 20 students had passed the examination. However, 6 students (3 from each) had failed in all three subjects. They had to repeat the course for another one year. Four students (3 controls & 1 research) had to be dismissed from the course due to third time failure in the examination.

After the remedial education intervention to repeater students, the final result obtained was as follows: out of 4 drop-out students, 3 students were from control group and one student was from research group. Out of 6 repeater students, 3 students each were from control and research group. Out of 12 supplementary students, 7 students were from control group and 5 students were from research group. These results showed that there were fewer drop-out students, less supplementary students from research group, and passed students were more in research group. The second-time failed students who become again repeater students were same from each group (Fig 1).

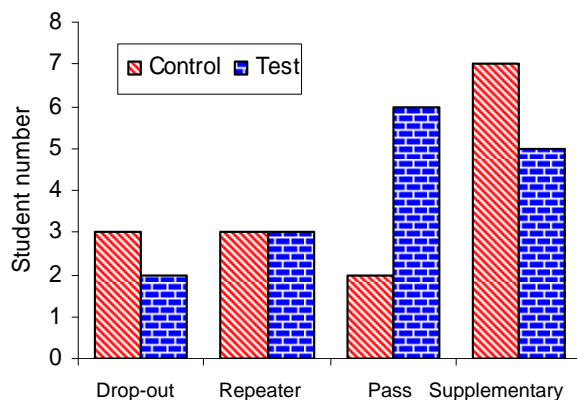


Fig.1. Comparison of final results between research and control group

DISCUSSION

By conducting the teaching learning intervention or remedial educational intervention on repeater students or low performance students, they became motivated, and the failure rate and drop-out rate reduced. They will be qualified as other ordinary students, their medical knowledge and skill will be properly trained to be an efficient health personals. Therefore, they can continue their medical course and become an efficient medical persons and competent basic undifferentiated doctors. The causes of academic failure are not only academic in origin. The students can get benefit from an individually tailored remedial programme

and get success in subsequent parts of the curriculum and examination.

ACKNOWLEDGEMENTS

We would like to express our deepest gratitude to Prof. U Maung Maung Wint, former Director-General, Department of Medical Science, Prof U Tha Hla Shwe, President, Myanmar Red Cross Society and Dr. Daw Mya Wai, Director, Department of Medical Science, for allowing to do this research and continuous support throughout this research. We owe our gratitude to Prof. Daw Than Nu Shwe, Rector, University of Medicine 2, Yangon and Prof. U Aung Gyi, Pro-rector, University of Medicine 2, Yangon for giving constant encouragement and support on this research.

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