

Humor as a Learning Aid in Medical Education

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Abstract : Attention span in a lecture is roughly 15 minutes. After this has been seen that no. of students paying attention begins to drop dramatically leading to loss in retention of lecture material. Objective of present study was to examine the effectiveness of humor when used as an intervention. The present Interventional, Randomized control trial study was carried out on medical students of fourth Semester, of RMCH, Bareilly, which has total ninety students. Class was divided into two groups, Group A and Group B by simple random sampling using lottery method, consisting of 45 students each. For both groups four lectures each were delivered on same topic, with a difference that in group A no intervention used while in group B humor was used as an intervention. Record of class attendance was maintained in both the groups and post lecture tests were conducted. Chi-Square test was applied for statistical analysis. In group B not only the attendance of students increased from class 1 to class 4 but was also more as compared to group A in each class and the difference was found to be statistically significant. Post lecture test scores showed that in group A there was no significant difference in marks obtained by students in class 1 and class 4, however in group B in which humor was used it was observed that in class 4 percentage of students getting marks above 50% increased as compared to class 1. We concluded that humor not only increases interest but also promotes learning.

Key-words: Humor, Learning aids, Attention span.

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INTRODUCTION: The way medicine is taught and learnt has undergone tremendous metamorphoses over the past few decades. Pedagogy or textbook based teaching or teacher-centered learning is gradually being replaced by student-centered learning¹.

Traditional lectures often suppress critical thinking and fail to address differences in student learning styles. They rarely put knowledge into practice and students are passive recipients. Art however, stimulates curiosity and creativity. Art can reproduce real life, arouse imagination, and give access to the complexities of illness. As it entertains, it enhances an inwardly understanding that does not easily fade with time and especially humor may enhance memory. Thus, it has been reported that for many people basic health information comes from entertainment television. Theatre has also been used in medical education either in helping students to understand life-threatening

situations or medical humanities. Lectures supported by theatrical performances may enhance knowledge acquisition and be an attractive alternative to traditional lectures. Applying literature and "theatre" to medical practice and medical school education is not new. When teachers allow adequate time for feedback and reflection, engaging students in role playing and peer education, this promotes active learning².

Any teacher will tell you that one of the hardest things about being a teacher is keeping students engaged. One of the best methods for keeping students focused on your class is using humor. By keeping a few simple rules in mind, you can use humor in the classroom to help your students learn, even if you're not a natural comedian. 1. Know your audience. 2. Use humor at appropriate times. 3. Encourage humor among your students. 4. Don't try too hard to jazz up the material you are teaching. 5. Stay away from "in jokes" between you and a few

students. The whole class should feel included in the humor³.

A wide range of low-risk humor techniques can be very effective in reducing anxiety and improving learning and performance, Strategies for using humor must be planned well and executed systematically to achieve specific outcomes. Both content-specific and generic humorous material tailored to the characteristics of each class can be effective in appropriate applications. Humor tends to be more effective when two or more of the senses, especially visual and aural (written and oral), are involved rather than just one sense. Offensive humor should never be used in the classroom

MATERIAL AND METHODS: Study design: The present Interventional , Randomized control trial study 4 was carried out on medical students of 4th Semester, of RMCH, Bareilly, which has total 90 students. Based on roll number the students of whole class were divided into two groups, Group A & Group B by simple random sampling using lottery method, consisting of 45 students each. Group A as control group and Group B experimental group. For both groups four lectures of different topic were delivered, with a difference that in group A classes no intervention used while in group B humor was used as an intervention.

Setting and participants: Study undertaken after approval from Institutional ethics committee and written consent of participating students, by Department of Orthopedics at Rohilkhand Medical College, Bareilly, which is a private institution. Here students come from diverse cultural, socioeconomic and educational backgrounds and majority of students belong to affluent families. They are exposed to a new learning environment, making new friends, and generally adapting to a new and somewhat uncertain world during their training at the medical school.

Tools: Class attendance record was maintained for both the groups in four lectures and post lecture tests were done to assess the implication of humor.

Data analysis: Data was analyzed using SPSS for Windows (Version 10.0) and Chi-Square test was applied for statistical analysis. A p value of 0.05 and less was considered significant.

RESULTS: Table & Figure 1 shows the status of attendance of two groups in four classes. It was observed that in group B not only the attendance of students continuously increased from class 1 to class 4 but it was also more as compared to group A in each class and the difference was found to be statistically significant in class 4.

Table-1: "Attendance" - Total No. of Students in each group=45

Class	Group A		Group B		P values
	No.	%	No.	%	
Class 1	37	82.2	38	84.4	P > .05, NS
Class 2	38	84.4	41	91.1	P > .05, NS
Class 3	37	82.2	42	93.3	P > .05, NS
Class 4	36	80	44	97.7	P < .01, Sig.

Figure -1 : Shows Attendance of Group A- Control group (No Humor), Group B- Experimental (With Humor)

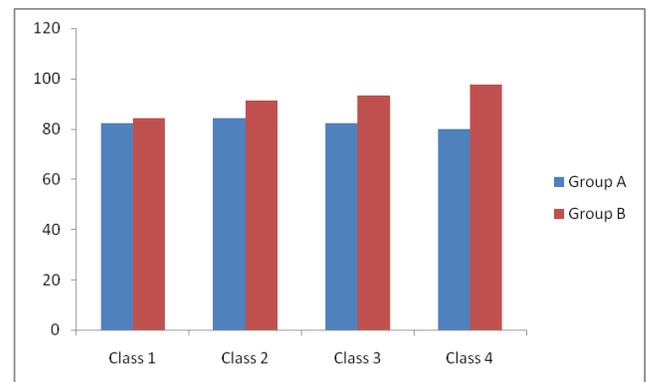


Table 2 shows that in group A there was no significant difference in marks obtained by students in class 1 and class 4, however in group B in which humor was used as an intervention it was observed that in class 4 percentage of students getting marks above 50% increased as compared to class 1.

Table-2: "Post Lecture Scores"

Group A					
SN.	Marks	Class1- (Present= 37)		Class4- (Present= 36)	
		No.	%	No.	%
1	Above 75 %	2	05.40	2	05.55
2	50-75 %	8	21.62	8	22.22
3	25-50 %	23	62.16	21	58.33
4	Below 25 %	4	10.81	5	13.88

$\chi^2 = .664$ df=3 p>.05 NS

Group B					
SN.	Marks	Class1- (Present= 38)		Class4- (Present= 44)	
		No.	%	No.	%
1	Above 75 %	5	13.15	8	18.18
2	50-75 %	18	47.36	22	50.00
3	25-50 %	13	34.21	12	27.27
4	Below 25 %	2	5.26	2	04.54

$\chi^2 = 0.6894$ df= 2 p>.05 NS

DISCUSSION: Teachers are often facing the dilemma of how to teach the students entering the classroom who are more challenging . With humor, impoverished students also succeed academically with the aid of humor ⁵. According to Therese j. Borchard there are nine ways that humor heals: combats fear, comforts, relaxes. reduces pain. boosts the immune system. reduces stress. spreads happiness. cultivates optimism. helps communication ⁶

In the study by Pemara et all titled- 'Using theatre in education in a traditional lecture oriented medical curriculum report the use of theatrical presentations performed by medical students in a lecture about headache to make medical students more active as learners. More than 90% of participating students agreed that the theatrical performance made it easier to understand the topic ².

In our study with humor as an intervention we define humor broadly as an event that elicits

laughter or amusement which brings smile and laughter. This could be formal like using jokes, stories and cartoons. We have been using set induction, images, pmonics and questioning more often. Other form is spontaneous which was highly required to tackle gossiping , mischief and difficult questions. Spontaneous humor is the most frequently used type of humor in college classrooms (Bryant et al., 1980a). Ad-lib responses to questions can promote an informal, relaxed, and nonthreatening classroom environment that is conducive to learning as long as the comments are not put-downs or offensive ⁷. Stories assist communication and bridge generations to provide continuity in thought, ideas, values and culture. Listening to stories is also a way to build up trust. ⁸

CONCLUSIONS: In present study humor was found to be very effective intervention in improving not only the attendance of the students in the class but also a very good way to increase their interest in the class there by promoting learning as observed by increase in % of students getting marks above 50% in class with humor. So an ardent desire of every student is to have a resourceful, motivated, interactive, inspiring teacher. Obviously, a good teacher makes way for sustainable, self-stimulating productive learning. Students adore such teachers.

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REFERENCES:

1. Mrityunjay, Dinesh Kumar, Seema Gupta. Medical Education-Present Scenario & Future. J K Science 2010; 12(3): 154-56.
2. Pemra C Unalan , Arzu Uzuner, Serap Cifcili, Mehmet Akman, Sertaç Hancıoglu and Hans O Thulesius. Using theatre in education in a traditional lecture oriented medical curriculum.

- <http://www.biomedcentral.com/1472-6920/9/73> (Accessed on 10.12.10)
3. How to Use Humor in Teaching.http://www.ehow.com/how_4517225_use-humor-teaching.html (Accessed on 10.12.10)
 4. Park K. Principals of Epidemiology and Epidemiologic Methods. Park's Textbook of Preventive and Social Medicine, 20th Edition. Jabalpur, M/S Banarsidas Bhanot Publishers, February 2009 : 77-79.
 5. Laugh and learn : Using humor to Reach and Teach Teens <http://hti.math.uh.edu/curriculum/units/2005/05/05.05.08.pdf> (Accessed on 16.02.11)
 6. THERESE J. BORCHARD, 9 Ways That Humor Heals. <http://psychcentral.com/blog/archives/2009/02/17/9-ways-that-humor-heals/>(Accessed on 16.02.11)
 7. Berk. R. A. Student ratings of 10 strategies for using humor in college teaching. Journal on Excellence in College Teaching 1996; 7 (3) : 71-92.
 8. Kenneth C Kelman. A study of storytelling, humor and learning in medicine. Clinical Medicine 2001; 1(3) : 227-22