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Impact of Attendance Policy in Rural Medical School: A Three Year Observational Study

KEYWORDS: Attendance policy Progressive attendance Student performance

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ABSTRACT *Attendance in classes has traditionally been thought to be a prerequisite for good academic performance. The compelling evidences have led to establishments of attendance cells with strict attendance policies in Medical Schools across India. The present study analyzes the potential benefits of such a policy against the costs of additional time and effort dealing with the same by observing the association between progressive attendance percentage and student performance over a span of three years and thereby appraising its efficacy to enhance student learning. The trend observed was strikingly skewed towards consistent correlation of progressive attendance and performance in IInd and IIIrd MBBS for the academic year 2011- 2013 University examinations. The top three performers in all the batches had progressive attendance above 82%. The present study ; by its three year observation, advocates the potential benefits of mandatory attendance policies specifically in Medical curriculum for better academic standards.*

Introduction

The determination of students' academic performance is an important issue in higher education. Of the many indicators like demography, active learning, students' attendance, and involvement in extracurricular activities (Ali, N., Jusoff, K., Ali, S., Mokhtar, N. & Salamat, A.S.A. ,2009); role of students' attendance in improving academic performance has received considerable attention. Attendance at classes has traditionally been thought to be a prerequisite to good academic performance. Some studies (Ali, N et al 2009 , Hancock, T.M. 1994, Riggs, J.W. & Blanco, J.D. 1994, Shimoff, E. & Catania, A.C. 2001) have shown that there is a positive correlation between attendance and academic performance. In addition, several sources show a relatively consistent relationship between attendance and grades, regardless of the course subject or level of student (Shimoff, E. & Catania, A.C. 2001). A meta- analysis reviewing the relationship of class attendance in college with grades and student characteristics, depicted that attendance has strong correlations with both class grades and Grade Point Average (GPA) (Crede, M., Roch, S.G. & Kieszczynka, U.M. 2010). The overwhelming archival data pointing towards strong association with good performance have led to policy framework from governing bodies of Medical Education to have an attendance criteria for eligibility in University Examinations. Although the argument is not only to safeguard improved exit performance; but attainment of knowledge and skills which are directly dependent on learners presence in class, practical or clinics. It is argued that attendance policy goes beyond just ''filling seats,'' by mandating student–faculty interactions (Carnegie Foundation, 1998) which is a critical aspect to facilitate learning.

We, at Datta Meghe Institute of Medical Sciences (Deemed University) have an attendance policy in place which mandates progressive attendance of 80% in practicals / clinics and 75% attendance in theory to be eligible for University Examinations. Besides; attendance is given due weightage in Internal Assessment. Speculating whether the policy is really benefitting students or is just a ritual followed by the learners and the faculty which dilutes the otherwise percieved benefits of attendance; was the felt need and hence this study . There can be situation where , once in class, the material probably may not engage students, the in-class assignments may not motivate them to work harder and hence, not necessarily there is an improvement in performance. The potential benefits of such a policy must be weighed against the costs of additional time and effort dealing with the policy on the part of the instructor and teaching assistants. This is an attempt to analyze the impact of progressive attendance on student performance over a span of three academic years and thereby appraise about the utility and efficacy of attendance policy of the Institute.

Material and Methods

It is three year observational (cohort) study conducted at Datta Meghe Institute of Medical Sciences (Deemed University) with the sample population as students of Second and Final MBBS (Part 1 & 11) of medical faculty from the year 2011- 2013. The study design is designated as cohort as the sample population was monitored for attendance (termed as progressive attendance) till the completion of academic term and observed for their performance in University Examination in co-relation with the same. Due ethical permission was obtained from the Institutional Ethical Committee. The attendance of the students were strictly monitored as per policy guidelines of the University; with specific interventions targeted ,as per the need ,towards improving their attendance. The interventions were in the form of monthly communication with students, quarterly communication with parents, communicating updated records to respective departments, monthly uploading of progressive attendance in University website, discussion in college council meetings, counseling the students and referral of chronic absentees to students guidance clinic. The average progressive attendance of the cohort who were considered eligible for University examination as per attendance criteria of ≥ 75% in theory and ≥ 80% or more in practical/ Clinics was charted against the percentage of students successful in University Examination in each category. Students below 75% theory and 80% practical were detained from appearing in final examination as per the policy of the University. Number of students detained in the year 2011 ,2012 1n2 2013 were four , three and three respectively. The trend of passing percentage with respect to progressive attendance in University examinations were recorded. The average attendance of top three students of IInd and Final

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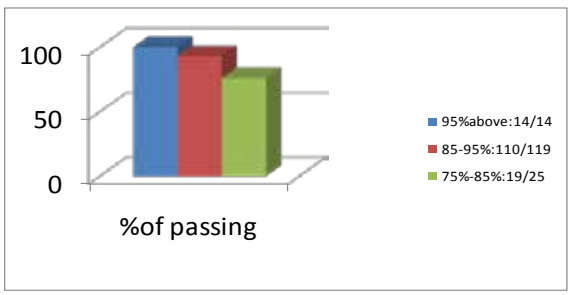
MBBS (Part 1 & 2) were charted.

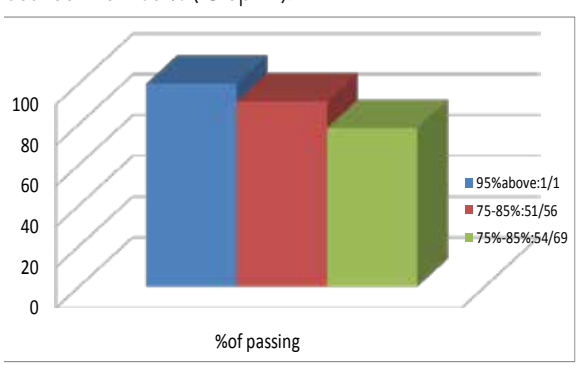
Observations and Results
The general trend observed were in favor of attendance policies as depicted by the results stated below;

Winter 2011 Examination
IInd MBBS – 100% students cleared the examination whose attendance was ≥ 95%, 93% students cleared with attendance in the range of 85 – 95 % and 76% students cleared for attendance between 75 – 85 % (Graph 1).



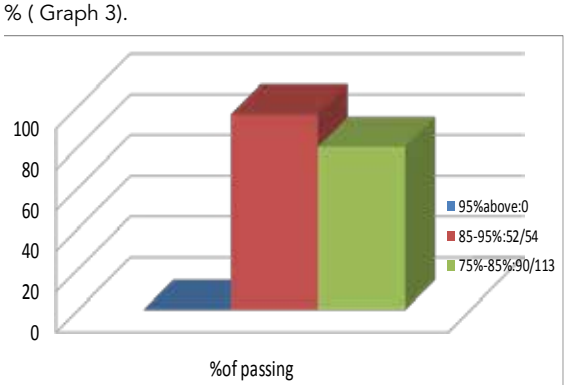
Graph 1 : 2nd M.B.B.S Winter-2011 Examination, Co-relation between Attendance and Results

IIIrd MBBS (Part 1)- 100% students cleared with attendance ≥ 95%, 91% students cleared with attendance ranging between 85 – 95 % and 78% students cleared with attendance between 75 – 85 % (Graph 2).



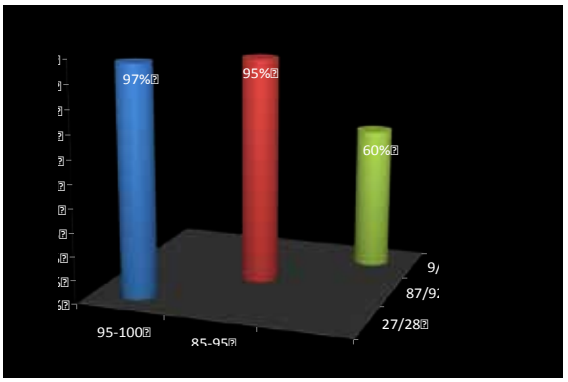
Graph 2 : 3rd M.B.B.S (Part 1) Winter-2011 Examination, Co-relation between Attendance and Results

IIIrd MBBS (Part 2)- 96% students cleared with attendance 85 – 95 % and 80% result for attendance between 75 – 85 % (Graph 3).



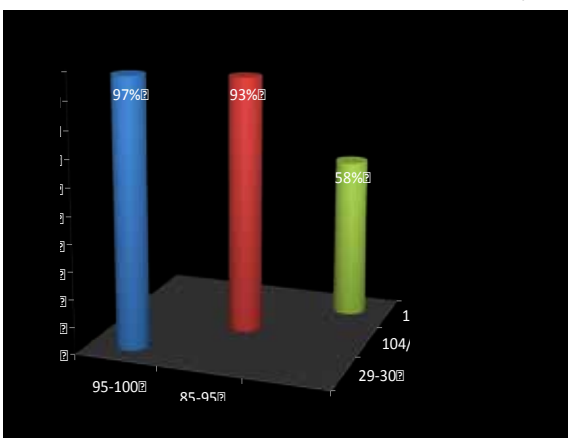
Graph 3 : 3rd M.B.B.S (Part 2) Winter-2011 Examination, Co-relation between Attendance and Results

Winter 2012 Examination
IInd MBBS – 97% result for students with attendance ≥ 95%, 95% result for students with attendance 85 – 95 % and 60% result for attendance between 75 – 85 % (Graph 4).



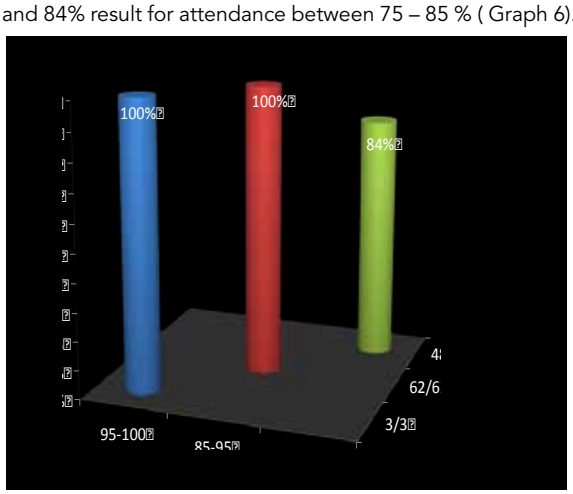
Graph 4 : 2nd M.B.B.S Winter-2012 Examination, Co-relation between Attendance and Results

IIIrd MBBS (Part 1)- 97% result for students with attendance ≥ 95%, 93% result for students with attendance 85 – 95 % and 58% result for attendance between 75 – 85 % (Graph 5).



Graph 5 : 3nd M.B.B.S (Part 1)Winter-2012 Examination, Co-relation between Attendance and Results

IIIrd MBBS (Part 2)- 100% result for students with attendance ≥ 95%, 100% result for students with attendance 85 – 95 % and 84% result for attendance between 75 – 85 % (Graph 6).



Graph 6 : 2nd M.B.B.S (Part 2) Winter-2012 Examination, Co-relation between Attendance and Results

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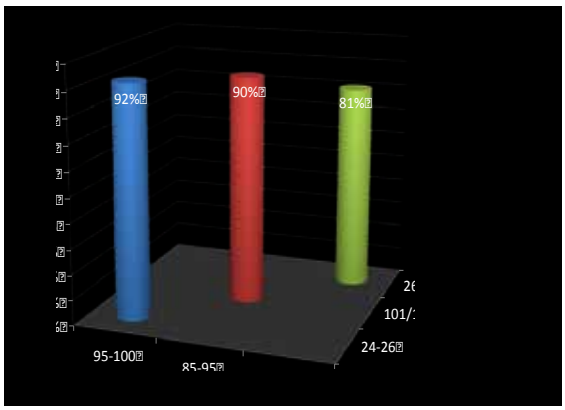
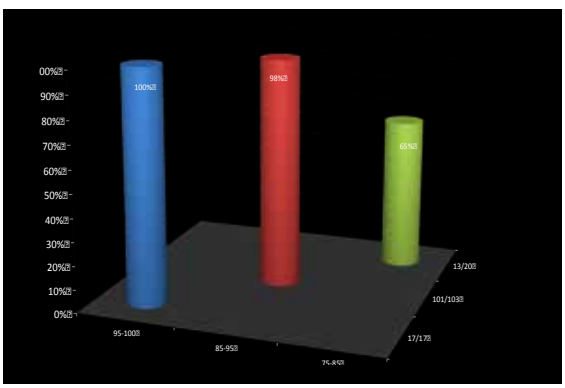
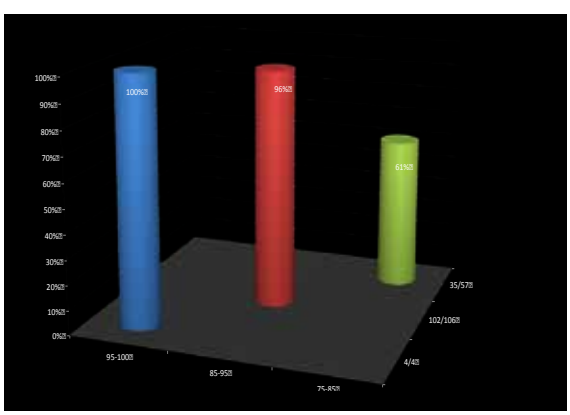
3. Winter 2013 Examination



Graph 7 : 2nd M.B.B.S Winter-2013 Examination, Co-relation between Attendance and Results



Graph 8 : 3rd M.B.B.S (Part 1) Winter-2013 Examination, Co-relation between Attendance and Results



Graph 9 : 3rd M.B.B.S (Part II) Winter-2013 Examination, Co-relation between Attendance and Results

The progressive attendance of top three performers were as follows;

Winter 2011 Examination : IInd MBBS top three performers had the average attendance of 88%, 92% and 89% respectively. Final MBBS (Part 1) top three performers had the average attendance of 93%, 90% and 82% whereas Final MBBS (Part II) had 91%, 87% and 89% respectively.

Winter 2012 Examination : IInd MBBS top three performers had the average attendance of 90%, 96% and 93% respectively. Final MBBS (Part 1)) top three performers had the average attendance of 97%, 94% and 94% whereas I Final MBBS (Part II) had 91%, 93% and 92% respectively.

Winter 2013 Examination : IInd MBBS top three performers had the average attendance of 91%, 93% and 89% respectively. Final MBBS (Part 1)) top three performers had the average attendance of 96%, 95% and 94% whereas I Final MBBS (Part II) had 95%, 93% and 94% respectively.

It was striking to note that the average attendance of top performers was not less than 82 % in all the cases with majority being above 90%.

Discussion

Literature suggests that attendance and academic performance are directly correlated, with some studies showing a relatively consistent relationship regardless of the course subject or level of student (Ali N et al 2009 , Shimoff E. & Catania A.C. 2001). Institutions such as the University of Minnesota justify an attendance policy by indicating that medical education requires in-person, active engagement among students, patients and faculty (University of Minnesota, 2011). This brings an important issue in focus that mere presence in the class is not a primary indicator of student involvement ; rather active engagement should be strived for. But; this active engagement can only be ensured provided the students come to the class ,which is identified as one of the major challenges in higher education. The current study was undertaken to evaluate the efficacy of attendance policy of the Institute in student performance against the degree of investment dedicated to sustain the policy effectually in terms of time , money and personnel. Essentially the study evaluates Return of Investment i.e level five of Kirkaptrick's model of Program Evaluation. The analysis depicted a consistent trend of better results with better progressive attendance. It was thought worthwhile to analyze the average attendance of top three performers which would provide a further insight into the degree to which presence in class matters to achieve desirable goals. The two year record depicted that top three performers had attendance above 85% with 72% students having more than 90% average progressive attendance. In a meta- analysis reviewing the relationship of class attendance in college with grades and student characteristics, it was shown that attendance has strong correlations with both class grades and Grade Point Average (GPA) (Crede, M., Roch, S.G. & Kieszczynka, U.M. 2010). Study by Damian H. Cohall (2012) divided the data on a semester basis in order to reflect the period in which the attendance policy was not enforced (Semester 1) and when it was enforced (Semester 2). Contrary to majority of available statistics, this study showed that improvement in attendance was not reciprocated with an improvement in academic performance in course assessments when the two semesters were compared. The findings suggest that other factors are more critical to academic success.

A similar perspective by Jonathan M. Golding (Jonathan M. Golding January 2011) depicted a correlation between attendance and exam performance but further pointed that when there was an attendance policy, students had lower exam scores than when there was no attendance policy. The findings highlighted the potential pitfalls of trying to implement interventions on the basis of correlational data (i.e., correlation does not translate into causality).

Though , the available arguments call for more experimental and meta- analytical studies to evaluate its benefits; the present study , by showcasing the consistency in performance with good attendance , do stresses its potential role in better academic outcome. The vast medical curriculum, which is to be imparted in a limited span of time, and which principally deals with knowledge , skills and attitude which can only be learnt by observation and practice, mandates a strict attendance policy in place. The study does not however label attendance policy as a stand alone mechanism for good learning outcomes, but , definitely it provides the platform upon which academic standards can be developed and sustained.

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Conclusion

The attendance policies in Medical Schools , though not the only , but can serve as one of the effective means to regulate the academic standard of the students and the University as a whole. The medical establishments should be forthcoming in empowering a strict and sound mechanism in place to ensure student's presence in class.

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