## Development Of E-Module For Physiotherapy Ethics For Final Year Students Of Bachelor Of Physiotherapy: A Pilot study

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Abstract : Background and Objectives: Recent amendments in syllabus from 2012 batch for learning physiotherapy ethics for 4 years & passing internal assessment in final year has prompted to undertake innovation with e module as against traditional lecture method which is currently in practice. e- Learning is teaching using electronic media which developed rapidly and power point presentations are being extensively used and hence pilot tested on 2012 final year exam appearing physiotherapy students although traditional lecture method continued for first and second year students. Aim of the study: To study the response of final B.P.Th. students on e module of ethics. Materials & Methods: Needs assessment on innovation was done. This was followed by e-module preparation. Module prepared according to syllabus in power point format. Module incorporated expert opinion from physiotherapy & M.E.T. faculty before final module was prepared which took one month and included one assignment. Module was posted on emails of all 25 final year students. 3 months time was given before evaluation by feedback forms, assignment completion & internal assessment scores. Results: All 25 students completed assignment & scored marks between 50-76% in internals. Students found that Module was easy to learn & follow, created self learning and could be read according to their convenience. Conclusions: it was possible to implement e modular pattern of learning although developing the e module required time and effort. e module enhanced self directed learning and can be implemented for all batches.[Kumar P et al NJIRM 2013; 4(5) : 121-124]

Key Words: e module, Ethics, Physiotherapy, Effectiveness, Assessment scores

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**Introduction**:e-learning refers to use of technology in education according to Bemard luskin<sup>1</sup> pioneer of e learning. "e " points towards " exciting energetic ,enthusiastic ,emotional ,extended excellent, and educational in addition to electronic .Parks suggested "e" should refer to everything, everyone ,engaging and easy<sup>2</sup>. "e" encompasses teaching using electronic media in any form<sup>3, 4</sup>. elearning industry in year 2000 was worth 48 billion dollars <sup>5</sup>. It has been found that youngsters are extensively using technology<sup>6</sup>.

e-learning has developed rapidly since 1990 but it is a expensive and time consuming .So the power point presentations are being extensively used<sup>8</sup> although there are limitations<sup>9</sup> and the same has been used in the current study for pilot testing the e modular teaching of ethics to physiotherapy student of final year exam appearing students in 2012 . However the first and second year physiotherapy (B.P.Th) students in 2012 continued with traditional lecture method for learning ethics. Literature has shown that typical standard e learning development for 1 hour takes about 73<sup>10</sup> to 220<sup>11</sup> hours but for power point presentations it takes only about 33<sup>11</sup> hours on an average. Knowledge regarding ethics is relevant in the profession of physiotherapy. The reason being that the physiotherapists are exposed to therapeutic litigations, complexities in physiotherapy practice, excessive awareness of patients & emerging importance of consumer courts .So W.H.O at all levels have been promoting the teaching of ethics in health care practice<sup>12, 13, 14</sup> & have emphasized to review the situation in south East Asian regions and developed the module in 2008<sup>15</sup>. But the scenario of physiotherapy ethics is different as it is one of the youngest branches in the allied health sciences. Therefore Maharashtra University of health sciences has included this in undergraduate physiotherapy curriculum.

**Context of the study:** Recently due to changes in syllabus the students of physiotherapy will have to undertake the learning of ethics from first to final year of physiotherapy & appear for examination in the final year and at least secure 50% marks in internal assessment. Hence innovative method of teaching is required so that the student of physiotherapy can retain the learning for longer periods of time .Keeping in view of all these challenges the module is being designed to

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address the needs of undergraduates' physiotherapy students in the form of e module power point presentation format. So that the patients gets the best of the physiotherapy services in an ethical fashion so that the community is benefitted in the long run.

**Aim of the study:** "To study the response of final B.P.Th students on e module of ethics"

## **Objectives:**

- A. Finding out effectiveness of e module through feedback from questionnaire from final bachelor of physiotherapy (B.P.Th) students.
- B. Finding out effectiveness of e module from assessment scores of final B.P.Th students.

**Materials & methods:** A Descriptive study on physiotherapy students of vspm's college of physiotherapy was carried out to know the effectiveness of the e module of ethics. The effectiveness was found out by the feedback responses obtained from the questionnaire & secondly by the assessment scores of students based on the written examination.

The subjects for the study were the final year students who are currently studying ethics and university examination appearing in summer 2013.The size of the sample was 25 as the intension was to include all the final years and in that batch the number of students were 25 in number.

General procedure: Ethical approvals & requisite permission was obtained from concerned authorities. Idea was discussed with Medical educational technology cell of NKPSIMS & Lata Mangeshkar hospitals Nagpur. Needs assessment was carried out and Students of final year were convinced for Participating in the pilot study and consent obtained. Available literature on physiotherapy ethics was gathered. e- Module in power point format was Prepared after taking expert opinions as students were more used to this type. The preparation of module took a month's time .e mails were taken from students. Module was posted on e mails of students. Adequate time

of 3 months was given to the students to go through the module. Evaluation was carried out by feedback from the students by validated questionnaire and likert scale was used to calibrate the feedback of responses .Scores of written examination obtained by students was also used for evaluation by observing the marks scored in the examination which has also been presented in graphical format (graph no 1)

**Statistical analysis**: the data was spread in Microsoft excel sheet 2007 & was analyzed statistically with EPI info statistical package.

**Results:** The study supports the aim as it could effectively study the responses from the students of final year of physiotherapy pursuing the learning of ethics as per their curriculum. The responses were taken after the completion of e module and the responses from feedback, activity completion and the marks scored in the internal assessments. Needs assessment was performed and initially 23 of 25 students agreed for e-modular learning. Two students (8%) were not willing to undertake the emodule because they did not have the mail identity. After they were assured that their e mail accounts would be created and taught how to access their mails they agreed for learning. The students were given ample time (3 months) to go through the module and then assessed with a validated feedback questionnaire comprising of 10 questions. Other 2 questions that is 11 & 12 question in the feedback was to know the opinions of the module that is three things liked about module & suggesting ways to improve the module.

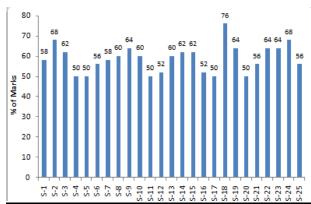
Most of the individuals agreed that e-module was helpful for learning and prepared according to syllabus. Objectives were clear and were in a position to explain the meaning of ethics, enhanced self learning, covered the basic difference between ethical and legal aspects. They also agreed that e- module was easy to follow. Majority of the students disagreed that they were not in a position to perform the activity mentioned in the module and that the language was difficult to understand. Majority of students agreed that e-

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module along with traditional lecture method will have better understanding

Three things that they liked about e-module were easy to learn & follow, created self learning and could read at any time according to their convenience. When they were asked to suggest ways in which e module could be better most of the students responded by asking to include classroom teaching by lecture along with e module and few had no suggestions.

## Graph 1 Represents The Student Scores



Students score analysis was used to know the effectiveness of module based on assessment scores which is one of the objective. There was 100% passing & the ranged between 50 to 76 % and one student scored distinction.

Discussion: The results of the current study indicate that there is always some amount of resistance whenever new patterns of teaching or innovative teaching methods are in co-operated. But if the students are apprised of advantages of innovative techniques then they are ready to accept the changes. Students are always comfortable with traditional lecture method of teaching and even when innovative techniques are involved they want a combination of it. This study was able to create self learning. This study has facilitated to incorporate the same for the students who start the learning of ethics at first year to final year of physiotherapy and appear the exam at the end of final year .so that the learning takes place from first to final year at the same time

they can access the module whenever they like so it further focuses' on student based learning.

**Conclusion**: this study has helped use of technology for teaching physiotherapy students and created self directed learning there by enabling students to solve problems independently & enhanced technological skills .But few disadvantages have also been encountered which included techno savvy students had an upper hand over non techno savvy students & the students still preferred traditional lectures along with e module.

Learning experience: it was possible to implement e modular pattern of learning although developing the e module required time and effort. Initially resistance was there. But acceptability increased by communicating & convincing students. Higher authorities, medical education technology cell, research cell, ethical committee along with peer group helped me to implement newer method in field of physiotherapy. Traditional techniques along with newer methods of learning always will have an advantage of creating an interactive learning and by this a self directed learning was created which is the needed at global scenario. This module in the course of time can be implemented for all batches.

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