



EFFECTIVINESS OF CONTINUING MEDICAL EDUCATION

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Abstract:

Introduction: Continuing medical education (CME) consists of educational activities which serve to maintain, develop or increase the knowledge, skills and professional performance and relationship that a physician uses to provide service for the patient, the public or the profession. As this is a new phenomenon in Pakistan, so we measured doctor's perspective regarding CME.

Material and methods: A cross sectional study was conducted in DHQ hospital (District headquarters) affiliated with Gujranwala Medical College (GMC), Gujranwala. A pre-structured questionnaire was filled by doctors manually and doctors were selected by using consecutive non-probability sampling. The response was measured on likert scale. The data was analyzed using SPSS version 21.

Results: Out of hundred, 77 doctors attended CME program in last 3 months of which, 74% doctors were agreed that CME is a beneficial activity, 72% doctors were agreed that it has positive effect on doctors performance, 67% doctors were agreed that it has a positive effect on patients health outcome and 44% doctors were agreed that CME programs should be mandatory. 23 doctors did not attend any CME activity in last 3 months of which, 1% doctors were strongly disagreed that CME is a beneficial activity, 3% doctors were disagreed that it has a positive effect on doctors performance, 5% doctors were disagreed that it has a positive effect on patients health outcome and 9% doctors were disagreed that it should be mandatory.

Conclusion: The overall conclusion is that ; CME appears to be effective at acquisition and retention of knowledge, attitudes, skills, behaviors and clinical outcomes.

Key words: Continuing medical education, health outcome, performance, doctor patient relation.

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INTRODUCTION:

Continuing medical education consists of educational activities which serve to maintain, develop or increase the knowledge, skills and professional performance and relationships that a physician uses to provide services for the patient, the public or the profession [1]. The content of CME is that body of knowledge and skills generally recognized and accepted by profession as within the basic medical sciences, the discipline of clinical medicine and the provision of health care to public. Medical science is dynamic and it is essential for doctors to become acquainted with the advances in medicine. CME is the essence of this concept. Tremendous advances are taking place in the field of medicine, continuously changing the concept, the approach to management and outcome of several diseases. CME is not a new concept. From essentially the beginning of institutionalized medical instruction (medical instruction affiliated with medical colleges and teaching hospitals), health practitioners continued their learning by meeting with their peers [2]. Ground rounds, case discussions and the meetings to discuss published medical papers constituted the continuing learning experience.

In this regards, CME has been propounded as an indispensable means for catching up with accelerating advances in health sciences and technology, as well as for improving medical performance, while financial resources allocated to it have been steadily increasing. More precisely, the acknowledging that medical personnel is employed in a most pertinent working field, the impetus for flexibility, adaptability and improved performance has come to the fore. Throughout the contemporary literature [3-5], the necessity for bringing physicians up to date with an evolving body of knowledge, so as to improve performance and optimize outcome, is emphasized, while delivering intervention has become a major enterprise globally [3,6].

Pakistan medical and dental council (PMDC) has developed standards and guide line on use of CPD (continuing professional development) as a mandatory requirement under section 16B of PMDC (Amendment) Act 2012 for the renewal of license to practice. According to PMDC:

“License to practice be given only to those medical/dental practitioners/specialist who have completed at least 5 credit hrs/yr (for GP’s) and 10 credit hrs/yr (for specialists) for training of CME. These training shall be conducted by recognized DAI/professional body” Systematic review of articles; (1) Continuing medical educations effect on

practice performance(Davis and Galbraith 2009) , (2) Effectiveness of continuing medical education (Marinopoulos 2007) , which based on questions; (1) Does CME improves performance of physicians? (2) Does CME have positive effect on patient’s health? (3) Which type of CME is effective? Systematic review of these two articles reached at conclusion that CME is very effective in enhancing the physician’s performance and patient’s health outcome. Purpose of our research on CME is that the scope of CME is increasing with time and there is no research on CME in Pakistan to evaluate the physician’s perspective on CME in Pakistan.

CME has been the focus of many studies conducted by medical teachers and health managers throughout the world. Convenience, relevance, individualization and self assessment, interest and speculation (CRISIS) were recommended to improve the effectiveness and the quality of CME program [7]. On the other hand, the quality control and establishment of effective CME programs have been under consideration from a long ago and the need for their evaluation has repeatedly been cited [8-10]. Nevertheless, the evaluation methods used have defects including lack of objectivity, repeatability and feed back to learners and compatibility. As CME is a new phenomenon in Pakistan, so we measured doctor’s perspective regarding CME.

Methodology:

A was cross sectional study was conducted in DHQ hospital (District headquarters) affiliated with Gujranwala Medical College (GMC), Gujranwala, to access the doctors perspective about continuing medical educational activities. One hundred doctors were included in the study using consecutive non-probability. All doctors except post graduate doctors were included in study. To know the doctors perspective about continuing medical educational activities a pre-structured questionnaire was used, which was consisting of following variables; doctors performance, patient health outcomes, doctors patient relationship, knowledge enhancement and continuing medical education effectiveness. A written Performa was filled by doctors manually and the participants were ensured that the survey is confidential and verbal consent was taken. Questionnaire was consist of two sections, one for those who has attended continuing medical educational activity in last three months , this section of questionnaire was consist of eight questions; (1) Do you think CME is a beneficial activity? (2)Does CME has a positive effect on doctors performance? (3)Does CME has a positive effect on patients health outcome? (4)Does CME improve doctor patient relationship? (5) Do you think

CME is effective in updating knowledge? (6) Does CME should be mandatory? (7) Interactive CME is more beneficial than non-interactive? (8) Do you think that its quality was up to the mark? Other section of questionnaire was for those doctors who did not attend the continuing medical educational activity program; it was consist of six questions; (1) You were unable to spare time? (2) The subject was not relevant? (3) Previous experience was bad? (4) Do you think it has no effect on your performance? (5) Do you think it has effect on patient's health outcome? (6) Do you think it is not beneficial? Data was collected in six weeks from 22nd June to 3rd August. The response was measured by using likert scale. The data was analyzed by using spss package version.

RESULTS:

One hundred doctors participated in this study. Out of hundred, seventy seven (77) doctors attended CME activity in last three months, of which 56 doctors attended CME program on the subject of Medicine

and pediatrics and 21 on Surgery and allied. Out of hundred, 23 doctors did not attend CME program in last three months. Data was collected from departments of medicine and pediatrics, surgery and allied, Gynea and obstetrics, pre-clinical. 56 doctors belong to clinical departments. Analysis of data shows that majority of doctors are agree that continuing medical educational activities are beneficial activities and are also helpful in updating the knowledge and also improves the performance. 49% doctors are strongly agreed that interactive CME program is more beneficial than non interactive and 44% doctors are agreeing that CME program should be mandatory. Most of the doctors who did not attend CME activity in last 3 months were unable to spare time. Majority of doctors disagreed that CME is not a beneficial or knowledge updating activity. So overall analysis of our data shows that, continuing medical educational activities has positive impact on doctor patient relationships, performance, knowledge enhancement and patient health outcome.

Table#1:

DEPARTMENTS	FREQUENCY(f)
Medicine and pediatrics	35 (35%)
Surgery and allied	14 (14%)
Gynae and obstetrics	7 (7%)
Pre-clinical	44 (44%)
Total	100 (100%)

Table#2: Response of doctors who attended CME program in last 3 months (n=77)

Serial no.	Questions	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
1.	CME is beneficial activity?	46%	28%	2%	0	1%
2.	CME has positive effect on doctor's performance?	31%	41%	2%	2%	1%
3.	It has positive effect on patient's health outcome?	31%	36%	5%	3%	2%
4.	It improves doctor patient's relationship?	23%	25%	20%	6%	3%
5.	CME is effective in updating knowledge?	47%	27%	2%	0	1%
6.	It should be mandatory?	21%	23%	14%	4%	5%
7.	Interactive CME is more beneficial?	49%	24%	2%	1%	1%
8.	Quality was up to the mark?	24%	41%	6%	5%	1%

Table#3: Response of doctors who did not attend CME program in last 3 months (n=23)

Serial no.	Questions	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
1.	Unable to spare time?	3%	14%	2%	1%	3%
2.	Subject was irrelevant?	1%	3%	5%	11%	3%
3.	Previous experience was bad?	0	0	1%	17%	5%
4.	Has no effect on your performance?	0	2%	2%	13%	6%

5.	It has no effect on doctor patient relation?	0	2%	1%	13%	7%
6.	It is not beneficial?	0	1%	1%	13%	18%

DISCUSSIONS:

The results obtained from this evaluation indicate that participation in continuing medical educational programs is effective in enhancing the knowledge level of the doctors. In other studies, the enhancing the knowledge level of doctors has been considered as evidence of the effectiveness of the continuing medical educational program [11, 12, 13-15]. It is clear that the increase in knowledge does not guarantee outcomes, such as change in behavior, competency or performance and consequently a better care service for the patients. Change in the behavior can be influenced by many individual factors; including learning styles, mental patterns, back ground, interest's personal experience which is brought to learning situations. Change in behaviors as an evidence of learning may also be influenced by many other variables such as; educational methods, personality and environment. Lack of readiness to change is another factor associated with the inconsistency of behavioral changes [16]. Extensive content and didactic teaching strategies usually applied in our CME programs are not appropriate for producing a change in behavior.

It appears that change in behavior would rather be expected after continuing medical educational program focusing on more specific content. In such specific courses, medical records may also be used as a tool for performance evaluation [17]. Furthermore, educational activities such as community based-strategies, practice based methods (reminders and patient mediated strategies) and multiple interventions are shown to be more effective while audits and educational materials lead to weakest outcomes [18]. To expect change in the behavior, professional practice health care outcomes and more interactive methods that enhance the participant's activity and provide an opportunity to practice skills should be used [19].

CONCLUSION:

The overall conclusion is that; continuing medical educational program to be effective at the acquisition and retention of knowledge, attitude, skills, behaviors and clinical outcomes. It has been concluded that; (1) CME does improves physicians' performance and patient health outcomes. (2) CME has more reliably positive impact on physicians performance that on patient health outcomes. (3) CME is more beneficial when it is interactive.

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