

Funding sources for continuing medical education: An observational study

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Abstract

Aims: Medical accreditation bodies and licensing authorities are increasingly mandating continuing medical education (CME) credits for maintenance of licensure of healthcare providers. However, the costs involved in participating in these CME activities are often substantial and may be a major deterrent in obtaining these mandatory credits. It is assumed that healthcare providers often obtain sponsorship from their institutions or third party payers (i.e. pharmaceutical-industry) to attend these educational activities. Data currently does not exist exploring the funding sources for CME activities in India. In this study, we examine the relative proportion of CME activities sponsored by self, institution and the pharmaceutical-industry. We also wanted to explore the characteristics of courses that have a high proportion of self-sponsorship. **Materials and Methods:** This is a retrospective audit of the data during the year 2009 conducted at an autonomous clinical training academy. The details of the sponsor of each CME activity were collected from an existing database. Participants were subsequently categorized as sponsored by self, sponsored by institution or sponsored by pharmaceutical-industry. **Results:** In the year 2009, a total of 2235 participants attended 40 different CME activities at the training academy. Of the total participants, 881 (39.4%) were sponsored by self, 898 (40.2%) were sponsored by institution and 456 (20.3%) by pharmaceutical-industry. About 47.8% participants attended courses that carried an international accreditation. For the courses that offer international accreditation, 63.3% were sponsored by self, 34.9% were sponsored by institution and 1.6% were sponsored by pharmaceutical-industry. There were 126 participants (5.6%) who returned to the academy for another CME activity during the study period. Self-sponsored (SS) candidates were more likely to sponsor themselves again for subsequent CME activity compared with the other two groups ($P < 0.001$). **Conclusions:** In our study, majority of healthcare professionals attending CME activities were either self or institution sponsored. There was a greater inclination for self-sponsoring for activities with international accreditation. SS candidates were more likely to sponsor themselves again for subsequent CME activities.

Keywords: Accreditation, continuing medical education, continuing medical education credit, funding, sponsorship

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Introduction

Continuing medical education (CME) for physicians is mandatory in most western countries for renewal of professional licensure and re-accreditation by

medical boards.^[1-5] This practice has been recently adopted by some state Medical Councils in India.^[6-9] At present, State Medical Councils mandate 30 CME credit hours per annum for license renewal.^[6,8,9] This mandatory CME credit requirement imposes a great burden on the medical community to organize relevant CME activities.^[5] Similarly, medical professionals are obligated to maintain a minimum number of CME credits to keep their medical license and practice active. Although CME activities do help medical practitioners to update their knowledge and skills, the cost incurred

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in attending such activities is significant and continues to be a major barrier for healthcare professionals in obtaining the necessary credits. Healthcare professionals hence seek to obtain funding from their parent institutions and pharmaceutical-industry to attend CME activities. Ethics of obtaining funding from pharmaceutical-industry has always been strongly debated and recent Medical Council of India guidelines prohibit such sponsorship.^[10] Data currently does not exist regarding the funding source for CME activities in India. Hence, in this study we seek to explore the relative proportion of CME activities that are sponsored by self, institution or pharmaceutical-industry. We also wanted to explore the nature of CME courses for which there is a higher inclination of self-sponsorship among healthcare professionals.

Materials and Methods

Design

This is a single-center retrospective data audit conducted at a privately owned autonomous academy for clinical training in Chennai, India. The study was conducted from January to December 2009.

The training center

The study was conducted at an autonomous simulation-based privately owned clinical training academy. This center conducts CME programs on various aspects of patient care, providing several medical education modules and workshops. It is an accredited center for both American Heart Association (AHA) basic and advanced cardiac life support (BLS and ACLS) and pediatric advanced life support courses. The CME courses are of variable duration, and are usually designed as small group, hands-on training sessions.

Data collection

Study data were extracted from a database created from a precourse questionnaire completed by the participants of all CME courses conducted during the study period. All the participants were requested to complete the questionnaire as part of the registration process. The questionnaire was designed to collect information on the participants' demographics, name of the course for which they enrolled, and the source of funding for participating in the course [Annexure 1]. The questionnaire also collected details on whether the attendees have previously attended a CME activity. Participants were subsequently categorized as sponsored by self, sponsored by institution or sponsored by pharmaceutical-industry. The courses

were broadly categorized as "courses that carried international accreditation" and "courses without an international accreditation". The courses with international accreditation were the AHA BLS and ACLS and Basic Assessment and Support in Intensive Care. On completion of these courses, participants were awarded a completion certificate attested by the respective international bodies. Data on all participants who returned for another CME activity within the same study period was also collected.

Data analysis

Data were analyzed using descriptive statistics. Kruskal-Wallis and Chi-square tests were performed to compare the self-sponsorship rates between courses that carried international accreditation and courses without an international accreditation and $P < 0.05$ was selected as the level of significance. Statistical analysis was performed using the Statistical Package for Social Science (SPSS) version 17.0 (Chicago, IL, USA).

Results

In the year 2009, a total of 2235 participants attended 40 different CME courses at the training center [Table 1]. Of the 2235 participants, 844 (37.7%) were physicians and 1391 (62.2%) were nonphysician health care providers. A total of 40 courses were conducted in 131 sessions, with 64 (48.9%) not providing international accreditation and 67 (51.1%) providing international accreditation.

Of the total participants, 881 (39.4%) were sponsored by self, 898 (40.2%) were sponsored by institution and 456 (20.3%) by pharmaceutical-industry [Figure 1]. Four hundred and sixty-three out of the 844 physicians (54.86%) and 418 out of 1391 (30.05%) nonphysicians were self-sponsored (SS). Out of the total participants, 1070 (47.8%) attended courses with an international accreditation [Figure 2]. For such courses, 63.3% were sponsored by self, 34.9% were sponsored by institution and 1.6% were sponsored by pharmaceutical-industry. For courses without international accreditation, 17.4% were sponsored by self, 45.1% were sponsored by institution and 37.5% were sponsored by pharmaceutical-industry. Significantly higher percentage of participants SS for internationally accredited courses compared to courses without international accreditation (63.3% vs. 17.4%; $P = 0.000$) [Figure 2]. There were 126 participants (5.6%) who returned to the training center for another CME activity during the study period. Higher proportion of SS participants sponsored themselves again for

Table 1: CME activities and number of participants

Course	Number of participants	Sessions
Courses with international accreditation		
HSFA course	5	1
HS CPR and AED course	7	1
BASIC	30	2
ACLS	48	7
BLS	945	55
Courses without international accreditation		
Arterial blood gas analysis	6	2
Pediatric life support	7	1
Mechanical ventilation workshop	8	1
Essentials of ventilation for nurses and technicians	11	2
Medical emergencies for dental surgeons	11	1
Community critical care	13	1
Fibreoptic bronchoscopy workshop	14	2
TPN	15	1
EPN	18	1
Central and Arterial line Training	22	6
Critical issues in critical care	22	1
Sepsis update	23	1
Handling patients with respiratory distress	26	1
Preventable problems in ICU	26	1
Basic respiratory care	30	1
Hemodynamic invasive monitoring	30	2
Pediatric emergency medicine course	30	1
Chest pain evaluation	31	1
Reacting to abnormal lab results	32	1
Emergency medications	33	1
Management of seizure disorders	35	1
ACLS	36	2
Oral and airway care in the ICU	37	1
Overdosage and poisoning	37	1
Pediatric emergencies	38	1
Nutrition for hospitalised patients	42	1
Effective practices in infection control	44	3
Trauma and emergency management-basic	40	2
Trauma and emergency management-advanced	13	1
BLS (TACT)	54	2
ECG interpretation	55	4
Infection control in the hospital and ICU	73	2
Principles of antibiotic use in the ICU	75	4
Basic airway management	76	5
IV cannulation	102	5
Total	2235	131

HSFA: Heart saver first aid; HS CPR: Heart saver cardio pulmonary resuscitation; AED: Automated external defibrillator; BASIC: Basic assessment and support in intensive care; ACLS: Advance cardiac life support; BLS: Basic life support; TPN: Total parenteral nutrition; EPN: Early parenteral nutrition; ICU: Intensive care unit; ECG: Electrocardiogram; IV: Intravenous

another CME activity compared with the other two groups (94% in SS group vs. 11.3% in institution sponsored group vs. 33.3% in pharmaceutical-industry group) ($P = 0.000$).

Discussion

In our single-centered study, we found that, majority of participants either sponsored themselves or were sponsored by their respective institutions. Only a minority of patients were sponsored by the pharmaceutical-industry. Our study reported a high rate of self-sponsorship. This could be due to several

plausible reasons. Our data reveals that most of the SS candidates attended courses that provided an internationally accredited certification. Hence, it is likely that health care providers perceived these courses as having value for their money and were more willing to sponsor themselves. It is also possible that courses with international accreditation being more expensive are less likely to be sponsored by the institution or pharmaceutical-industry. Although, our study did not specifically evaluate reasons for self-sponsorship, we speculate that courses with international accreditation are often attended by health care providers who seek professional opportunities outside India. It is hence likely that these courses have a higher rate of self-sponsorship since institutions and pharmaceutical-industry view such courses to be in conflict with their respective institutional goals. Our study had a high proportion of nonphysician health care professionals whose sponsorship rates by the pharmaceutical-industry may differ from that of the physicians. Finally, we also reported that participants who SS were more likely to return to a CME activity and sponsor themselves again within the study period.

Our study showed that a large proportion of CME activities were institution sponsored. 48.1% of our sessions were dedicated toward teaching crucial resuscitative skills for health care providers such as BLS and ACLS. Mandatory training of all health care providers in these basic skills is deemed necessary by quality monitoring and certifying bodies such as National Accreditation Board for Hospitals and Healthcare Providers and Joint Commission International. Hence it is likely that institutions were willing to fund their health care providers to attend such courses.

Last, our rate of pharmaceutical-industry-sponsorship is lower than reported in literature. Existing data suggests that pharmaceutical and medical device company funding supports up to 60% of accredited CME costs in the United States.^[11,12] Tabas *et al.*^[11] have reported in their study that most participants (>60%) felt that commercial funding was essential for support of CME courses. In another study done by Mueller *et al.*,^[13] 62% of the participants believed CME courses should accept commercial support if doing so reduced the overall cost of the course. In a study by Rutledge *et al.*,^[14] where physicians in Scotland were surveyed for funding sources to attend educational conferences and meetings, about half received funding from industry, and about one-third would not have attended conferences without such support. In comparison, our study reported only 20.3% of CME activities being

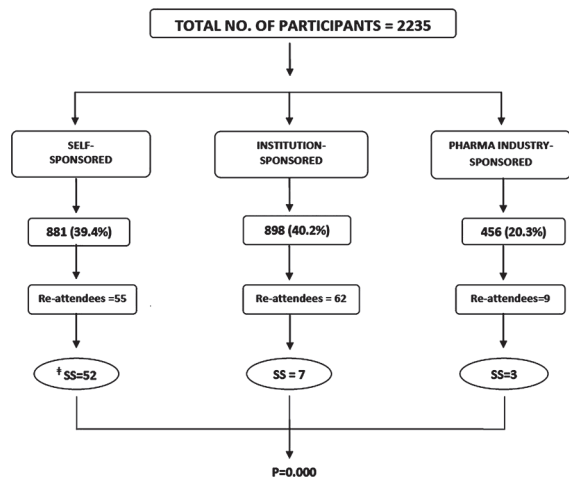


Figure 1: Sponsorship details with re-attendance. #SS – Self sponsored

sponsored by pharmaceutical-industry. Since all of the CME activities at our center were skill based, and not product or device based it is likely that our pharmaceutical-industry-sponsorship rates were significantly lower than that reported in other studies. Moreover, since our training center is not accredited by any institution or university, we might have had a lower rate of pharmaceutical-industry-sponsorship. In addition, our data was compiled from questionnaires given to participants at the time of their registration for their courses. Self-reporting by the participants could have altered the sponsorship rates.

Our study is the first in India exploring the funding sources for CME activities. We had large number of participants attending a wide variety of courses. The data were compiled from a database that included all participants during an entire year. We could provide important insights by reporting a strong association between courses that provided an internationally accredited certification and self-sponsorship. Last, our study included both physician and nonphysician health care professionals. However, our study is limited in that it was conducted in a single autonomous training academy and hence our results may not accurately reflect the true CME funding patterns across the country. Our study only evaluated funding sources for short workshops providing CME credits and hence this pattern may not be representative of the funding sources for participation in regional, national or international conferences. Moreover, our study does not explore the reasons for participants to sponsor themselves. However, considering the lack of any data with regards to funding sources for CME activities, we feel our study has provided important insights into the existing practices.

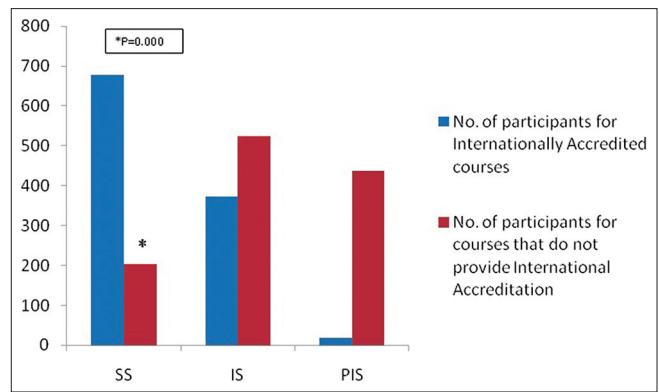


Figure 2: Sponsorship details with accreditation value. SS – Self sponsored; IS – Institution sponsored; PIS – Pharmaceutical industry sponsored

Conclusion

Our study shows that majority of healthcare professionals attending CME activities are either self or institution sponsored. There is a greater tendency among health care providers to self-sponsor for CME activities with international accreditation. SS candidates have a higher inclination to sponsor themselves again for a subsequent CME activity.

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Annexure 1

QUESTIONNAIRE

COURSE FOR WHICH YOU ARE REGISTERING:

.....

NAME: Dr. Mr. Ms.

DATE OF BIRTH: **GENDER:** MALE FEMALE

EDUCATIONAL QUALIFICATION:

INSTITUTION:

DEPARTMENT

MAILING ADDRESS:

.....

.....

CITY: **STATE:** **PINCODE:**

PHONE: OFFICE: **RES:** **MOBILE:**

EMAIL:

ARE YOU A

PHYSICIAN NON-PHYSICIAN

DESIGNATION:

SPECIALITY:

SPONSORSHIP DETAIL FOR THIS COURSE:

SELF YOUR INSTITUTION PHARMACEUTICAL COMPANY

ARE YOU AN ALUMNUS? YES NO

IF YES, PROVIDE COURSE DETAIL AND DATE, PREVIOUSLY ATTENDED:

.....

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