

The Perspective of the Oncology Health Care Professionals on Educational Conferences

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Abstract

Background: Continuous education is vital to update the knowledge of the health care professionals (HCPs) engaged in cancer management. We aim to explore the perspective of the oncology HCPs on oncology conferences.

Methods: A questionnaire was handed to the delegates and faculty of an oncology educational scientific conference in the Kingdom of Saudi Arabia (KSA). The questionnaire explored the perspective on the ideal number, duration and the educational value of such conferences.

Results: Medical oncologists represented 70.5% of the 78 responders. All responders attended oncology conferences in the preceding year with 24.4% have attended >9 conferences. The educational value of these conferences was rated 7.98/10. Two thirds are satisfied with the frequency of conducted event or desire more. Short (half to one day) meetings are preferred by 66.67% and the mean number of optimum educational events is 5.7 per year. Educational events were highly valued (score $\geq 8/10$) as venues to meet colleagues.

Conclusion: The findings suggest that the current frequency and scientific value of oncology conferences and educational events are satisfactory to the majority of the relevant HCPs in the KSA. More CME events of up to one day in duration seem to be desired.

Keywords: conference, continuous professional development, continuous medical education, Oncology, professional education

1. Background

Continuous professional development (CPD) is vital to maintain and update medical and non-medical knowledge and skills of health care professionals (HCPs). Medical societies and professional health care regulatory bodies emphasize on engagement in CPD activities to assure that their members are well equipped to best serve patients (Karas, Sheen, North, Ryan, & Bullock, 2020). The United Kingdom's General Medical Council (GMC) lists knowledge, skills and performance as the first domain of its Good Clinical Practice (GCP) directive. The GMC explains that this domain should be achieved by regularly taking part in activities that maintain and develop competence and performance (The UK General Medical Council, n.d.-a). In addition, The GMC links successful annual appraisal and periodic revalidation to attendance and participation in Continuous Medical Education (CME) activities (The UK General Medical Council, n.d.-b). CPD can be achieved through self-directed CME activities such as reading, literature search, writing scientific reports and on-line courses. These activities have their own advantages such as convenience and low cost. On the other hand, CPD can be achieved through group learning such as physical attendance of seminars, workshops, symposia and conferences which can offer the additional attraction of travel, socializing, distancing away from the stressful work environment and direct interaction with peers and experts. Group learning events such as conferences are favorite venues for dissemination of results of health-related research (Tabak, Reis, Wilson, & Brownson, 2015). Respected international oncology societies such

as the UK National Cancer Research Institute (NCRI), the European Society of Medical Oncology (ESMO) and the American Society of Clinical Oncology (ASCO) regularly hold a significant number of CME activities in many parts of the world. Local groups in other countries including the Kingdom of Saudi Arabia (KSA) organize similar, albeit smaller events at the national and regional level. These events vary in structure, contents, quality, duration, format and frequency. There is undocumented impression within the oncology community in the KSA that the frequency and the duration of these CME events need to be revised and probably reformed in order to be more attractive and to better serve their purpose. This can only be achieved by first investigating, understanding and confirming the real opinion of the HCPs towards these activities. We conducted this study to investigate the perception of the HCPs towards specific aspects of the currently conducted group learning CME events and what they suggest to improve these aspects.

2. Methods

This is a questionnaire based study. The questionnaire was designed collectively by the investigators reflecting what they understood from the oncology HCPs to be points that need to be addressed, namely frequency and number of oncology CME activities. Additionally, the questionnaire explored the number of national events attended in the preceding year, and the professional/social value (Table 1). Brief demographic and professional capacity questions were also included. Standard questionnaire development steps were followed by the investigators, including identifying dimensionality, determining the questionnaire format (close ended questions) and determining the items format. Clarity and simplicity was considered when the questionnaire was designed to guarantee maximum response. The questionnaire was not subjected to formal pilot, validity and reliability testing. However, the investigators adopted a continuous routine of revision and modifications to guarantee acceptable level of contents validity of the final version.

It was made clear in the survey that the questions apply to physical attendance educational oncology meetings (conferences and symposia including short “<1 day” events) in the KSA.

Paper copies of the questionnaire were hand presented personally to the delegates and faculty during registration at an oncology related educational scientific conference in the KSA. The conference was a full day event at a weekend in January 2020. Responders completed the questionnaire anonymously and without supervision. Data is analyzed and presented as simple frequencies. The approval of the research ethics committee was granted.

Table 1. The questionnaire showing the results including the demographics of the responders and their answers

Result	Number (%) [range]
Specialty	
Medical Oncology	55 (70.5)
Radiation Oncology	5 (6.4)
Haemato-oncology	3 (3.85)
Other medical specialty	4 (5.13)
Nursing	10 (12.82)
Clinical supporting service	1 (1.3)
Age (years)	
<30	6 (7.69)
31-40	31 (39.74)
41-50	24 (30.77)
>50	17 (21.79)
Gender	
Male	58 (74.4)
Female	20 (25.6)
How many oncology conferences/symposia did you attend in 2019?	
1-3	17 (21.8)
4-6	30 (38.5)
7-9	12 (15.4)
>9	19 (24.4)

Which conference/symposia duration do you prefer?	
Half to full day	52 (66.67)
Two days or more	26 (33.3)
Rate the scientific educational value of oncology conferences/symposia you attended in 2019 (1: bad and 10: excellent)	
1-4	0
5	4 (5.13)
6	4 (5.13)
7	18 (23.08)
8	29 (37.18)
9	9 (11.54)
10	14 (17.95)
Mean [range]	7.98 [5-10]
What is the ideal number of annual oncology conferences/symposia is optimum to meet your educational needs?	
Missing answers	5
Available answers	73
1	0
2	0
3	10 (11.7)
4	15 (20.55)
5	20 (27.4)
6	12 (16.44)
7	2 (2.74)
8	5 (6.85)
9	1 (1.37)
10	3 (4.11)
11-15	5 (6.85)
Mean [range]	5.7 [3-15]
What do think of the frequency of oncology conferences/symposia conducted in 2019?	
There were too many events (more than needed)	25 (32.05)
Just about the right number	40 (51.28)
Too few and I prefer if there are more events	13 (16.67)
Educational events are a venue to meet colleagues. How do you value this aspect? (1: do not value this aspect and 10: value this aspect a lot)	
Missing answers	6
Available answers	72
1	0
2	1 (1.39)
3	1 (1.39)
4	0
5	7 (9.72)
6	3 (4.17)
7	6 (8.33)
8	14 (19.44)
9	13 (18.06)
10	27 (37.5)
Mean [range]	8.32 2-10]

3. Results

One hundred and eight copies of the questionnaire were distributed. Seventy eight (72.2%) copies were completed and are the subject of this report. Medical oncologists (70.5%) and males (74.4%) represent the majority of responders. All responders have attended oncology conferences in the preceding year with a quarter of them (24.4%) have attended >9 conferences and educational value of these conference was highly rated (mean rating = 7.98/10). A third (32.05%) suggest that there are more than needed events while the rest are satisfied with the frequency of conducted event or desire more of them. Short (half to one day) meetings are preferred by two thirds (66.67%) and the mean number of optimum educational events is 5.7 per year (Table 1). Educational events are highly valued (score $\geq 8/10$) as venues to meet colleagues by 75% of responders. The questionnaire and the results including the demographics of the responders and their answers are depicted in Table 1.

4. Discussion

The health practice is continuously changing, mostly due to the expanding field of drug development research. The United States Food and Drug Administration (FDA) averaged 37 novel drug approvals per year over the past decade including 48 approvals in 2019 (de la Torre & Albericio, 2020; The US Food and Drug Administration, n.d.). In 2018, the FDA approved 59 new drugs (42 New Chemical Entities and 17 Biologics) breaking the previous record of 53 approved in 1996 (de la Torre & Albericio, 2019). During the period between 2009 and 2017, anti-cancer drugs (17.54%) and biologics (15.56%) approvals were the highest among all indications (Batta, Kalra, & Khirasaria, 2020). Over the recent few years, immunotherapy has become an established pillar of cancer treatment with rapidly expanding indications (Kruger et al., 2019).

It is clear from the above that there is a pressing need for oncologists to keep up to date. The obvious question is "How can oncologists keep up with this explosion of knowledge?" The answer lies largely in CPD, mostly through engagement in CME activities.

Our study was designed to specifically investigate the frequency and number of oncology group CME activities such as conferences and symposia. For this reason we approached HCP who were physically present at such oncology events.

All of the responders have attended conferences in the preceding year with 30 (38.5%) and 31 (39.8%) attended 4-6 and ≥ 7 conferences respectively suggesting that they perceive conferences as a valuable source for CPD. It is tempting to argue that the enthusiasm for other methods of CPD such as on-line modules, webinars, on-line streaming conferences ...etc. may be rising. However, some authorities still believe that real life meetings do have their own place and can't be abolished. Certainly all of the oncology societies are organizing regular group real life conferences and symposia (Mishra, 2016). Our study was conducted shortly before the adoption of social distancing as a consequence of the COVID-19 pandemic and therefore, did not address alternative venues, sources and formats of CME such as virtual educational activities. During the pandemic scientific medical educational activities were shifted to an online format, in the form of virtual webinars. Certainly, virtual activities were necessary and contributed to the continuation of the CPD during the peaks of the pandemic. It remains to be seen if virtual meetings can on the long-term replace the scientific and the social environment enjoyed by live activities. Digital-meeting fatigue, loss of fruitful hallway conversations, impersonal interactions and time zone differences have been cited as reasons why virtual interaction falls short and as a justification for a speedy return to live events (Moss et al., 2021).

A recent survey of 326 physicians demonstrated that 74.8% were "strongly satisfied" or "satisfied", with most virtual training courses and International conferences. However, the majority felt overwhelmed by the number and frequency of webinars during the pandemic and 62.8% disagreed that webinars can replace in-person meetings after the pandemic (Ismail II, Abdelkarim A, 2021). More recently and as the restrictions started to be at least partly relaxed, we saw a trend towards adopting hybrid and completely in-person live CME activities.

The duration of any educational event depends on many factors such as the number of audience, the contents of the meeting, setting, venue ...etc. In an online survey answered by 75 physicians representing various specialties in Georgia, 30/75 (40%) and 25/75 (33%) preferred CME activities that last 3 and 5 hours respectively. The survey did not seem to ask about longer than one day activities (Undilashvili, Beriashvili, & Khutsishvili, 2020).

The duration of the oncology CME meetings that take place in the KSA is quite variable, ranging from few hours to three full days. There have been some suggestions that extended conferences may not be ideal and that relatively shorter duration meetings are more attractive. Our results confirms this notion as two thirds (66.67%) favored shorter (half to one day), yet a non-negligible proportion (33.3%) favored longer duration conferences. This finding should guide conferences organizers to consider a mixture of both shorter and longer duration events to be

able to reach out to all oncologists.

About 90% of the responders endorsed the high scientific value of the CME events they attended in the preceding year. The majority reported a rating score $\geq 7/10$ while the overall mean and median ratings of 7.98/10 and 8/10 respectively. This suggests that the oncology CME events in the KSA are an excellent source of CPD for oncologists and there are no concerns regarding their scientific value or contents. The study was not designed to investigate why the responders were satisfied with the scientific value of the CME events. Possible reasons include: high and up to date scientific contents, expert faculty and encouragement of interaction. Other reasons may include outcome measures gained by the attendees that reflected positively on their own practice such as: adoption of new treatments, improvement in patients' care, professional promotion and development and maintenance of professional license. A survey of 248 US medical and radiation oncologists reported a mean score of 8/10 when asked "How important do you think attending conferences are to an oncologist's career advancement? (Knoll, Griffith, Jones, & Jagsi, 2019). Analysis of data collected during professional inspection visits involving 215 family physicians in Quebec (Canada) found that composite score of satisfactory rating for quality of practice was proportional to the number of annual CPD hours engagement. The authors concluded that CPD activities of sufficient quantity and quality are correlated with a high quality of professional practice (Goulet et al., 2013). Better patients' satisfaction and reduced complaints could also be positive outcomes of CME activities. A large Canadian study included 2792 physicians showed that physicians who reported overall participation in CPD activities were significantly less likely to receive quality of care-related complaints than those who did not report participating in CPD (Wenghofer et al., 2015).

There are some calls within the oncology community in the KSA to review the number and frequency of the oncology educational group events. We do not have accurate data on the number of the oncology CME events that take place every year. However, a controversial observation is that there are frequent events and that some of them are not well attended giving the impression that there might be more events than required. Understandably, there is scarcity of data about this issue in the literature. In an editorial, Mishra S commented that there has been large number of cardiology major (and smaller) conferences in India in the year 2015 and that only a select group of physicians were repeatedly attending these conferences (Mishra, 2016). Regardless, our results are reassuring that the current situation is not that of excessive or exclusive conferences because 51.28 % responded that there was the right number of oncology conferences in 2019. In addition, another 16.67% prefer if there are more events.

Addressing the KSA oncologists' perspective on the ideal number of external CME events was a major impetus to conduct this research. About two thirds (67.75%) of responders suggested that 5 or more conferences per year are ideal to meet their educational needs. A significant minority (19.18%) suggested 8 or more events (Table 1). These findings should reassure organizers of CME events and encourage them to continue providing these highly needed and appreciated activities. It is difficult to recommend a set number of events that is appropriate for the whole oncology community because educational needs and personal circumstances of individual HCPs are different. A survey of 449 oncologists at 47 US cancer centers reported that women attended significantly fewer conferences than men even after adjustment for potential confounding factors (Knoll et al., 2019). Other factors that may guide HCPs to attend more or less conferences include degree of involvement in research, numbers of CME hours required by different regulatory bodies, work load, local institutional CME activities, and institutional support such as study leaves and funding for staff education. These factors are expected to equally apply to HCPs in the KSA. The majority of cancer centres in the KSA are involved in some aspects cancer related clinical research including a relatively modest engagement in clinical trials (Alghamdi et al., 2020). Recently, there has been a sense of conviction among the oncology community in the KSA that involvement in cancer related clinical research needs to be taken to the next level (Zekri, 2018). Any expansion in clinical research will need scientific platforms such as conferences and symposia to disseminate and discuss the results of such research. A survey answered by 775 health researchers from the US, UK and Brazil reported that publication in academic journals and presentation at academic conferences are the top two methods of dissemination of research results (Tabak et al., 2015). Additionally, conferences are used for scientific networking and discussing new research ideas among different research groups. Certainly, responders to our survey were of the opinion that educational events are highly valued (mean score: 8.32/10) as venues to meet colleagues. In the KSA, physicians are required to complete at least 150 accredited CME hours over 5 years to maintain a valid professional license with the Saudi Commission for Health Specialties (SCFHS) (Saudi Commission for Health Specialties, n.d.).

The above mentioned growing enthusiasm for research and the obligation to maintain the professional license are examples of why responders may be interested in attending a relatively high number of CME events. Another appealing factor is that many of these events are supported by the pharmaceutical industry and are available for HCPs without registration fees. The causes and effects of such sponsorship is one that is controversial and lends

itself to extensive discussion that is beyond the scope of this paper.

The aim of this project is to find answers to some of the questions voiced within the oncology community suggesting that the frequency and the duration of CME may not be optimum to better serve their purpose. We were unable to find established and validated questionnaire in the literature to adopt in our study, therefore, we developed a simple and short questionnaire to serve the purpose. The questionnaire underwent rigorous reviews and modification by the investigators (refer to the “Methods” section) to guarantee an acceptable level of credibility in the results. Formal pilot, validity and reliability tests are necessary for detailed and complex questionnaires in particular those exploring sensitive areas such as medical and psychology research. Our questionnaire was repeatedly reviewed and was not designed to result in complicated cumulative scoring system, and therefore, it was felt that onerous and formal pilot, validity and reliability tests are unrealistic and unnecessary.

The relatively small number (n=78) of participants in our study can be considered a limitation. However, 72.2% of the attendees completed the questionnaire and this high rate of response suggests that the results likely represent the opinion of the larger population. The majority 55 (70.5%) of attendees and responders were medical oncologists which is the section of oncologists specializing in treating patients with anti-cancer drugs. Thus, one can argue that in this context, the views of medical oncologists about CPD and CME are pivotal as they are the specialists who need to keep up to date with the rapidly expanding drug development programs. Finally, the medical oncology community is relatively small and the opinion of 50 members should represent that of the whole community. Nevertheless, there might be an advantage of exploring more areas of the oncology CME such as contents, delivery, format and assessing knowledge gained by attendees in larger cohorts. Such areas may need to be addressed in the future by formally validated questionnaires in different CME settings.

5. Conclusion

Our study is one of few and is probably the only study from the region that investigated specific aspects of CPD, namely frequency and duration of CME events among oncologists. The findings provide a high level of reassurance that the current frequency and scientific value of these events are satisfactory to the majority of the relevant HCPs in the KSA. More CME events of up to one day in duration seem to be welcomed.

5.1 Lessons

- 1) The oncology health care professionals (HCPs) appreciate the format and frequency of the current continuous medical educational (CME) activities.
- 2) Relatively short (half to full day) CME activities seem to be preferable.
- 3) CME events are highly valued as venues to meet colleagues.

Research Ethics

The institutional review board has granted approval to this work.

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Competing Interests Statement

All authors declare no financial or competing interests.

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