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Research Letters

Assessment of Radiation Oncology Participation in Interdisciplinary Education at the American Society of Clinical Oncology Annual Meeting and Pathways to Expand Involvement

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Purpose: Integration of radiation oncology (RO) content into the educational offerings of other cancer specialty societies may improve the use of radiation therapy in guidelines-concordant care. However, minimal data describes the extent to which this occurs. This retrospective study assessed RO participation at the American Society of Clinical Oncology (ASCO) annual meeting education sessions.
Methods and Materials: The 2021-2024 ASCO annual meeting program guides were used to collect speaker names and specialties for all "Educational" and "Case-Based Panel" session types. The annual meeting education committee rosters from these same years were used to collect the names and specialties of committee members and leaders for each track to determine whether RO committee membership was associated with RO participation as a speaker in an education session.
Results: A total of 20% (n = 85/423) of education sessions included an RO speaker or moderator, comprising 6% of 1419 total speakers. RO participation was more common in Case-Based Panel sessions (n = 32/86, 37%) than in Educational sessions (n = 53/337, 16%). There was a decline in RO participation in Educational sessions from 22% in 2021 to 10% in 2024 ($p < .0001$), although RO participation in Case-Based Panel sessions remained stable over time ($p = .62$). Thirty-five percent (n = 30/85) of committee track-years included an RO committee member, and 8% (7/85) included an RO track leader. Ten percent (n = 39/411) of total committee members were radiation oncologists. Sixty percent (n = 51/85) of the annual meeting sessions that included an RO speaker were held in tracks with an RO education committee member. RO committee presence strongly correlated with RO speaker participation (odds ratio, 49.0; $p < .0001$).
Conclusions: Radiation oncologists are uncommon speakers at ASCO annual meeting sessions and have low and declining rates of involvement in planning committees. Volunteering to participate in planning committees and submitting Case-Based Panel proposals may be reasonable approaches for radiation oncologists to increase their involvement and improve interdisciplinary education among oncologists in other specialties.

Introduction

Underuse of radiation therapy is common across a variety of malignancies because of patients' dependence

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on medical and surgical oncologists to make appropriate referrals for radiation oncology (RO) consultation to discuss radiation as a treatment option.[1-7] As such, high-quality interdisciplinary education (IDE) for these other oncologists is important to address knowledge gaps or biases and adhere to guideline-concordant, patient-centered care.[8] While each type of oncologist (medical, surgical, and radiation) is expected to acquire a fundamental understanding of treatment modalities outside their own specialty during their undergraduate or graduate medical education, continuing education for practicing physicians is also important in a field as rapidly evolving as oncology.[9,10] Some IDE occurs informally through routine workplace interactions or tumor board conferences.[11,12] However, development of more comprehensive IDE for trainees and practicing physicians could help facilitate greater knowledge and guideline-concordant care.[13,14]

National or international conferences conducted by specialty societies are a potentially effective forum for large-scale IDE. However, there is little baseline data describing the extent to which RO speakers are integrated into the Educational sessions at these meetings. The American Society of Clinical Oncology (ASCO) annual meeting is the largest oncology conference in the world, attracting tens of thousands of oncologists, researchers, and other health care professionals. Although the attendees at this meeting are predominantly medical oncologists, the speakers may span a wide range of disciplines. Our hypothesis for this retrospective study is that radiation oncologists are infrequent participants in ASCO annual meeting education sessions, but the probability of participation would increase for disease sites for which radiation oncologists are on the ASCO planning committee.

Methods and Materials

Between 2021 and 2024, the ASCO annual meeting conference website was used to collect information on session titles and participating speakers (including moderators) for all Educational and Case-Based Panel session types.[15] All other session types related to presentation of scientific research abstracts or other special sessions (eg, Award Lecture, Highlights of the Day, and Business Meeting) were excluded from data collection to focus the analysis on the educational aspects of the meeting. Additionally, ASCO publishes the annual meeting education committee roster each year as part of the meeting program. The names of the committee leader and committee members for each track (eg, Breast Cancer, Gastrointestinal Cancers, etc) were recorded for 2021-2024. Web searches were conducted to determine which annual meeting speakers and committee members were radiation oncologists.

Descriptive statistics were used to report the participation of radiation oncologists as speakers and committee members. The Fisher's exact test and the χ^2 test were used to determine whether RO committee membership was associated with RO participation as a speaker in an Educational session. The Cochran-Armitage trend test was used to assess changes in the participation of RO speakers over time.

Results

Between 2021 and 2024, there were a total of 423 education-oriented session types (median, 105/y; range, 102-111), comprising 337 Educational and 86 Case-Based Panel sessions. Table 1 shows the findings for each year, organized by session type. Eighty-five of these sessions included an RO speaker (median, 22.5/y; range, 15-25), representing participation in 20% of the 423 total sessions and 6% of the 1419 total speakers. RO participation was more common in Case-Based Panel sessions (n = 32/86, 37%) than in Educational sessions (n = 53/337, 16%). The Cochran-Armitage trend test demonstrated a statistically significant decline in RO participation in Educational sessions over the 4-year period, from 22% in 2021 to 10% in

Table 1 Radiation oncology representation at the American Society of Clinical Oncology annual meeting educational sessions

Year	Educational Sessions with an RO/ Total Educational Sessions, n/N (%)	Case-Based Panels with an RO/ Total Case-Based Panels, n/N (%)	Total Sessions with an RO/ Total sessions, n/N (%)
2021	18/82 (22.0)	7/23 (30.4)	25/105 (23.8)
2022	14/89 (15.7)	9/22 (40.9)	23/111 (20.7)
2023	13/84 (15.5)	9/21 (42.9)	22/105 (20.9)
2024	8/82 (9.8)	7/20 (35.0)	15/102 (14.7)
Total	53/337 (15.7)	32/86 (37.2)	85/423 (20.1)

Abbreviation: RO = radiation oncology.

Table 2 Radiation oncology representation at the American Society of Clinical Oncology Annual Meeting educational committees

Year	RO Committee Members/ Total committee members, n/N (%)	Tracks with an RO/ Total tracks, n/N (%)	Tracks with an RO leader/ Total tracks, n/N (%)
2021	8/107 (7.5)	8/22 (36.4)	2/22 (9.1)
2022	10/111 (9.0)	7/22 (31.8)	1/22 (4.5)
2023	10/102 (9.8)	7/22 (31.8)	2/22 (9.1)
2024	11/91 (12.1)	8/19 (42.1)	2/22 (10.5)
Total	39/411 (9.5)	30/85 (35.3)	7/85 (8.2)

Abbreviation: RO = radiation oncology.

2024 (Z-score = −17.52; $p < .0001$). In contrast, RO participation in Case-Based Panel sessions was stable over time (Z-score = 0.49; $p = .62$).

Over the 4 years evaluated, the ASCO Educational Committee maintained a median of 22 tracks per year (range, 19-22). Table 2 shows RO participation in the educational committee tracks for each year. There were a total of 85 track-years, of which 30 (35%) included an RO committee member and 7 (8%) included an RO track leader. Thirty-nine (10%) of the 411 total committee members over this time were radiation oncologists.

Table 3 shows which disease site−specific tracks had RO committee members each year and how that correlated with annual meeting education sessions with RO speakers for that track. Among the 85 sessions that included an RO speaker, 51 (60%) occurred in tracks where an RO served on the education committee. The Fisher's exact test demonstrated a significant association between RO committee presence and RO speaker participation (odds ratio, 49.0; $p < .0001$). A confirmatory χ^2 test also showed a significant association between RO committee presence and RO speaker participation ($\chi^2 = 129$; $p < .0001$). Among the 30 total track-years that had an RO committee member or leader, only twice did the track lack an RO speaker for its education sessions. The Breast, Kidney/Bladder, Prostate/Testicular/Penile, Head and Neck, and Lung tracks included RO planning committee members throughout all 4 years. Tracks that did not have any RO committee members over the 4-year period included: Care Delivery and Regulatory Policy, Immunotherapy, Molecularly Targeted Agents and Tumor Biology, Geriatric Oncology, Global Health, Health Services Research and Quality Improvement, Melanoma/Skin Cancers, Pediatric Oncology, Prevention/

Table 3 Association between radiation oncology committee representation and speaker participation for tracks with at least 1 radiation oncology committee member between 2021 and 2024

	RO track member (yes/no) and sessions with an RO speaker (n)			
Track	2021	2022	2023	2024
Breast	Yes (3)	Yes (1)	Yes (1)	Yes (3)
Central nervous system	Yes (1)	No (0)	No (0)	Yes (0)
Colorectal/anal	Yes (2)	Yes (2)	Yes (1)	No (0)
Gastroesophageal, pancreatic, hepatobiliary	No (0)	No (0)	Yes (1)	Yes (2)
Gynecologic	Yes† (2)	Yes (2)	No (0)	No (0)
Head and neck	Yes (3)	Yes (4)	Yes† (2)	Yes*,† (3)
Hematologic	No (0)	No (0)	No (0)	Yes (0)
Kidney/bladder	Yes (1)	Yes* (2)	Yes† (1)	Yes* (2)
Lung	Yes† (2)	Yes* (3)	Yes* (1)	Yes* (1)
Prostate, testicular, penile	Yes (1)	Yes (1)	Yes (1)	Yes (1)

Abbreviations: RO = radiation oncology.
*Multiple RO committee members.
†The track leader was an RO.

Risk Reduction and Hereditary Cancer, Professional Development and Education Advances, Sarcoma, and Symptoms and Survivorship.

Discussion

IDE in oncology is critical to promoting evidence-based, unbiased, and patient-centered care. However, achieving high-quality IDE longitudinally, from residency training through independent practice, is inherently challenging, given the siloed nature of both graduate medical education and continuing medical education in the United States.[9,10] National oncology specialty societies have the potential to develop partnerships and standards that promote IDE among their members, but the extent to which this occurs is not well described. Our findings demonstrate that although there is some incorporation of RO into the ASCO annual meeting educational program, from 2021 to 2024, radiation oncologists comprised only 6% of speakers and 20% of total Educational sessions, with decreasing participation over time. Although only 10% of the total annual meeting planning committee members were radiation oncologists, there was a strong correlation (odds ratio, 49) between RO planning committee participation in a given track and an RO speaker role for that track.

An important consideration when interpreting these findings is what quantity of interdisciplinary involvement is appropriate at a meeting like ASCO, which primarily serves a medical oncology membership. A similar question could be asked for the annual meetings of RO or surgical oncology specialty societies. While prescribing a specific threshold is beyond the scope of this work, we propose that, ideally, all planning committees should invite multidisciplinary involvement in some capacity, whether as a full committee member or in a related role, such as a consultant or reviewer. While many ASCO education sessions may not warrant an RO speaker due to a focus on more purely medical oncology topic, more multidisciplinary involvement of the planning committees is likely to lead to the development of more sessions where multidisciplinary physician participation is appropriate. Tracks that lacked an RO committee member across all 4 years and may be particularly amenable to RO involvement included: Symptoms and Survivorship, Professional Development and Education, Sarcoma, Pediatric Oncology, Melanoma/Skin Cancers, Health Services Research and Quality Improvement, and Care Delivery and Regulatory Policy.

Prior studies demonstrate that increasing racial, ethnic, and gender (male/female) diversity in a planning committee translates into greater diversity in speaker selection,[16-18] and, as our findings suggest, a similar concept likely applies to the inclusion of medical disciplines. Importantly, more inclusive speakerships facilitate sharing of a variety of perspectives and mitigate unconscious bias in final presentations.[16-18] ASCO has many radiation and surgical oncology members, so intentionally incorporating them into the planning of the meeting should be feasible. Ultimately, we believe that all specialty societies should consider the importance of hearing from "outside" oncologists in their educational offerings, given that effective multidisciplinary care translates into improved cancer outcomes[11,12] and that diverse voices are known to improve health outcomes across all areas of medicine.[19,20]

The primary limitation of this study is that we evaluated only a single conference over 4 years. We also did not have access to the actual presentations for each education session, making a more detailed assessment of which education sessions radiation oncologists "should" or "could" have participated in impossible. It would also be useful to learn more from those few radiation oncologists who are on the planning committees about how they successfully became involved, to facilitate a similar path for other interested radiation oncologists.

We were also limited in our ability to properly contextualize our findings, as no other studies report this type of data on the extent of interdisciplinary involvement among other specialty societies. For instance, it is possible that RO participation at the ASCO annual meeting is higher than medical oncology participation at the American Society for Radiation Oncology annual meeting. RO participation in surgical oncology meetings may also be less common than at the ASCO meeting. It is also possible that disease site −specific meetings, such as the ASCO Gastrointestinal or Genitourinary Cancers meetings or the San Antonio Breast Cancer Symposium, may provide a better venue for IDE than more general annual meetings. A targeted needs assessment of practicing oncologists would provide useful information to guide future programming.

Conclusions

This study characterized the extent of RO involvement at the ASCO annual meeting. From 2021 to 2024, radiation oncologists only comprised 6% of speakers and were part of 20% of total sessions, with decreasing participation over time. The involvement of an RO on the planning committee for a given track was strongly associated with having an RO speaker for that track, which could be a reasonable avenue for increasing RO participation. As oncologic care continues to evolve and grow more complex, finding ways to bridge knowledge gaps between its 3 principal therapeutic disciplines is likely to facilitate more cohesive, patient-centered care.

Disclosures

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