PURPOSE

Fourth year medical students (MS4s) participate in clerkships to familiarize themselves with the field of radiation oncology and to evaluate and audition for residency programs. However, MS4s’ perceptions of their radiation oncology clerkship experiences have never been formally evaluated. This study aims to characterize the MS4 perception of the radiation oncology clerkship experience from the current nationwide pool of applicants.

METHODS

An anonymous web-based survey was developed with input from academic radiation oncology faculty, a radiation oncology resident, and a MS4 applying to radiation oncology residency. The survey was a multiple-item Likert scale (5 = “Extremely important”, 1 = “Not at all important”), with additional Yes/No and free response questions. The survey was distributed via a Facebook group for MS4s who applied for the 2012 radiation oncology match and a web-based radiation oncology forum ([www.studentdoctornetwork.com]). Wilcoxon signed rank-sum was used for statistical analysis.

RESULTS

Responses were obtained from 35 of the approximately 200 MS4s applying for radiation oncology in 2012. Student characteristics are summarized in Table 1. Surveys included information for 97 individual clerkship experiences. The median number of clerkships completed was 3 (range 1-5) with a median clerkship length of 4 weeks (range 2-12). Goals and objectives (written or provided) were provided by 60% (5907) of clerkships. Respondents were 22 MD, 10 MD/PhD, and 3 non-MD/PhD combined degree candidates. 60% (21/35) of MS4s were planning to apply to radiation oncology prior to their clerkships, while 40% (14/35) were undecided. MD/PhD’s compared with others had translated research opportunities significantly higher as a factor influencing their specialty choice (Likert scale 4.8 vs. 2.96, p<0.001) while MS4s planning to apply to radiation oncology prior to rotations trended towards rating a personal experience with cancer (self, family, or friend) as a factor influencing their specialty choice (Likert scale 3.1 vs. 2.14, p=0.07) (Table 2).

Clerkships included formal case discussions in 35% (34/97), hands-on didactic sessions (e.g. consensus in 23%) (22/97), and lectures specifically for MS4s in 52% (35/69) of clerkships. Lectures were departmental lectures during 87% (84/97) of clerkships (Figure 1). Additional rotation information is summarized in Table 3. The most frequently utilized web resources by MS4s during their clerkships included the Radiation Oncology Wikibook resource (33/35), the National Comprehensive Cancer Network webpage (25/35), UpToDate.com (14/35), and RTOnGo.org (14/35) (Table 4). Student clinical and research experiences are summarized in Tables 5 and 6.

Educational activities that MS4s ranked moderately to extremely important to include in a clerkship curriculum were (1-5 Likert scale) an opportunity to perform an unsupervised history and physical; (2) an opportunity to give a formal lecture; (3) didactic hands-on session on radiation contouring; (4) submission of a paper presented at a national meeting; and (5) participation in national research (Figure 2). This difference was not observed after completion of ≥2 clerkships (Table 8). An introductory lecture during pre-clinical years was ranked as moderately to quite important (Likert scale 3.71). A single lecture or series of lectures as the optimal educational experience for medical students not pursuing radiation oncology as a specialty (Table 10).

CONCLUSIONS

MS4s consider formal didactics an important component of a radiation oncology clerkship curriculum. However, MS4s report that less than half of their clerkship experiences included didactic lectures, case discussions, or hands-on sessions tailored for the MS4 level of expertise. Academic radiation oncology departments may enhance the educational value of the clerkship experience by developing formal didactic curricula for MS4s. Such an approach may enrich the pool of applicants with those who better understand the demands of the field.