

Conference Abstracts

Radiotherapy Knowledge, Perceptions and Barriers among Medical Trainees and Healthcare Providers in Africa: A Survey-Based Study

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Background

Radiation oncology (RO) is a critical yet underrepresented component of medical curricula in Africa, primarily due to a shortage of trained personnel and infrastructure. This study aimed to systematically assess the understanding, perceptions, and key obstacles surrounding radiotherapy among medical trainees and healthcare providers across Africa.

Methods

A cross-sectional study design was used with an online survey, in both English and French versions, being used to collect data from medical trainees and healthcare providers across Africa. The survey period was between October 2024 and January 2025. The data collected included demographics, exposure, and previous RO experience, self-reported knowledge on RO assessment on a 5-point scale (1–2 = low, 3 = average, 4–5 = high), perceptions on the importance of RO, and barriers to education and the clinical practice of RO. The analysis was by descriptive statistics.

Results

1. respondents from more than 7 African countries, with a median age of 27, filled the survey: 54.5% male and 45% female. 48.9% completely lacked exposure to RO. For those with exposure (51.1%), the primary sources were lectures (76%) and clinical rotations (34%). Knowledge levels on RO were self-assessed as low by 77% of participants; only 23% rated their knowledge as average or high. Despite knowledge gaps, 69% recognized RO as "very important" in cancer care. 75% noted the lack of clinical exposure as a barrier to their knowledge on RO, while 50% cited the lack of mentorship. Only 36% felt confident discussing or referring patients for radiotherapy, with an overwhelming 92% advocating for more RO training and collaboration.

Conclusion

Significant gaps in RO knowledge and clinical exposure exist among future and current healthcare professionals in Africa. There is a strong demand and clear need for targeted educational interventions, including enhanced mentorship and structured clinical rotations, to build RO capacity and improve cancer care outcomes on the African continent.