

Changing the Changing Room Practice in Radiation Oncology

Dear Sir,

The diagnosis of cancer is a stressful event for patients and their families. We thus strive to design health-care facilities which help in creating a healing environment. Radiation oncology departments (ROD) should be planned in a way so that patient's dignity and self-determination are accommodated while considering operational efficiencies.^[1] Changing rooms in ROD are designated areas where patients change into hospital gowns which help in easy exposure for the region to be irradiated, make external skin markings and do patient set up while maintaining appropriate privacy for the patient. Planning for these rooms need to be done at the time of designing radiation facility because these maps need to be cleared by regional regulatory bodies for example, in India, it is through a national body named atomic energy regulatory board.^[2] Despite changing rooms being used for a long time, there is no clear consensus or best practice guideline available regarding its need and location.

In order to know the current changing room practices in our country, we developed a questionnaire consisting of 30 questions reflecting on changing room practices at their institutes and their opinion regarding ideal practices. These formulated after testing construct validation using Lawshe's method.^[3] These were circulated in various RODs in the country through E-mails from national associations of oncologists, physicists, and therapist's in India with a fortnightly reminder for a month.

From 103 responses (62 institutes), 37.1% of institutes did not have any changing room. Among the institutes with changing rooms, their distribution between inside and outside treatment areas was equal (45.9%). The remaining 8.2% of respondents had multiple changing rooms, i.e. both inside and outside the treatment area. About 74.8% (77) of respondents wanted at least one changing room per bunker while the remaining 25.2% (26) wanted two changing rooms per bunker. Although various advantages were seen for both locations, 53.6% of respondents having changing room inside wanted an outside changing room and among them 35.7% (10) expected that this change would improve their machine throughput. While 69% (29) of respondents with no changing rooms, preferred an outside changing room, as majority of them (55%) feel it would help in improving the throughput of the machine. None of the respondents with an outside changing room wanted to change its location. Overall, major advantages of room outside were identified as: prevention of accidental exposure (71.4%), improved patient privacy (71.4%), and improved patient throughput (42.9%).

The most common partition being used in constructing the changing rooms located inside the bunker was a curtain on rails (47.5%) while a brick wall with a door for changing rooms located outside (39.3%). However, in ideal conditions, 61.2% of respondents wanted brick wall with door for changing rooms located outside while 60.22% respondents wanted curtain on rails for changing rooms located inside. The respondents considered chair (78.6%), sanitizer (71.8%), dustbin (67%) locker (63%), and emergency bell (59.2%) as essential items, while napkins (59%) and washbasin (39.8%) were considered optional. About 100% of respondents considered ambient lighting and wide door as the essential part of changing room. About 64% of respondents were from institutes where gowns/dresses are provided to the patient by the hospital.

About 32.8% of responders were not aware of the authorized persons who planned the present location of their institute changing rooms, while 41% claimed it to be a combined decision of director, licensee, head of department, and safety officer. About 36.1% of responders were not aware of reason for the present location of changing room in their institute. None of the respondents were aware about any available guidelines for planning of changing rooms; however, all of them agreed that such guidelines should be made available. On our search for terms "changing room", "guidelines," "radiotherapy," and "radiation oncology" alone and in combinations on Google and PubMed, we were unable to identify any relevant literature.

Hence, from our survey responses frequency, we recommend that an ideal changing room should be outside the machine bunker with two rooms per bunker, made of bricks wall and a door with ambient lighting, wide door, a chair, sanitizer, dustbin, locker, emergency bell, napkins, and a washbasin. For practical purposes, a less than ideal but optimal changing room could be inside or outside the bunker with one room per bunker made of either bricks or curtain on rails with ambient lights, wide door, a chair, sanitizer, dustbin and a locker.

We hope that findings in the present survey will help various existing and future ROD to plan their changing rooms appreciating ergonomics, ecology, economics, machine logistics, and utility with due consideration for patient needs and expectations. We hope that our recommendations will serve as a blueprint document for perusing a modern approach toward developing good patient pathways for quality care in radiation oncology facilities across the country and would motivate regulatory bodies to consider formulating baseline guidelines for the changing rooms.

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Conflicts of interest

There are no conflicts of interest.

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