







Analysing modesty concerns and unease for radiotherapy patients from diverse communities and cohorts.

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Background

Cancer patients undergoing radiotherapy (RT) usually have to expose some part of their body for treatment.

- 23% of Italian patients with breast cancer felt uncomfortable when undressed for treatment¹.
- Little is known about patient perceptions of unease and modesty during RT across other populations and treatment sites.

Results

312 participants recruited between August – November 2023

- Median age = 63 years (range 31 92)
- Demographics shown in Table 1. IRT and SEM (Figure 1) demonstrates:
 - 4% of WR unease explained by baseline levels of modesty unease prior to diagnosis.
 - Higher baseline of modesty unease associated with higher unease experienced in the WR (p < 0.005).
 67.5% of TR unease explained by WR unease, gender of treating staff and baseline levels of modesty unease.
 Strong association between WR and TR unease, where higher WR unease was associated with higher TR unease (p < 0.001).
 Participants who preferred treatment staff of same gender exhibited more unease (p < 0.001).
 Participants with a higher baseline of modesty unease experienced more unease in the TR (p = 0.001).

Aims

• To determine what contributes to unease in radiotherapy waiting rooms (WR) and treatment rooms (TR).

Methods

- 38-question survey about RT WR & TR unease and supplied treatment garments (TG).
- Recruitment from 4 RT centres in SWSLHD and WSLHD.
- Survey available in both hard copy and electronic format
- Survey available in English, Arabic, Vietnamese, Traditional Chinese and Simplified Chinese languages.

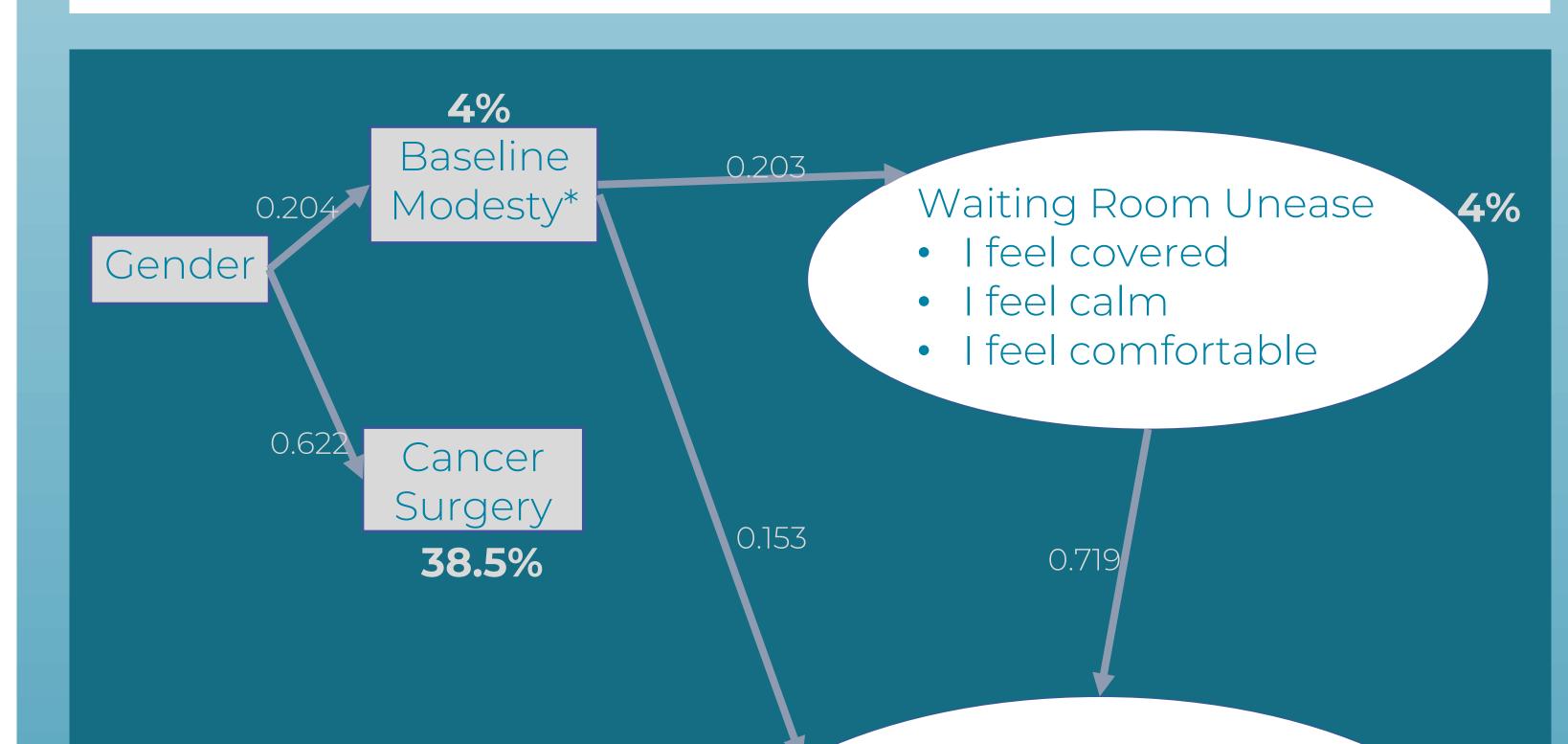
Patient demographics collected from patient records.

Eligible participants:

- undergoing 1st course RT to the pelvis or
- females undergoing first course RT in the chest region

Ineligible participants:

- prescribed treatment <3 doses (daily visits).
- Item response theory (IRT) used to analyse psychometric properties of WR and TR unease. Structural equation model



(SEM) developed to determine relationships with reported unease in the RT WR and TR.

Table 1: Participant Demographics

Variable		n	%
Gender	Female	237	76%
	Male	75	24%
Treatment	Thorax	214	69%
Area	Pelvis	98	31%
Survey Language	English	297	95%
	Arabic	3	1%
	Vietnamese	6	2%
	Chinese Simplified	4	1%
	Chinese Traditional	2	1%
Ancestry	Included Australia	156	50%
	Did not include Australia	156	50%
Country of Birth	Australia	165	53%
	Overseas	133	43%
	No response	14	4%
Speak	Yes	116	37%
language othe	NO	193	65%
than English	No response	3	1%
Treatment Centre	Centre A	61	20%
	Centre B	91	29%
	Centre C	93	30%
	Centre D	67	21%
Treatment Garment	Gown with no overlap	61	20%
	Full/long kimono style gown	123	39%
	Short kimono gown	49	16%
	Treatment pants	24	8%
	My own clothes	50	16%
	No response	5	2%
Waiting Room (once changed)	Private Space	82	26%
	Other type of space	222	71%
	No response	8	3%



Figure 1: Final model of factors affecting TR and WR unease. Note. All significant paths with their coefficients are shown. Percent (%) represents portion of variance explained. *Baseline modesty was determined by the question "Thinking about

BEFORE your diagnosis: Were you uncomfortable if you needed to be undressed in front of strangers? For example in shared spaces at the gym or public swimming pool.

Conclusion

- Patient modesty can affect unease in both RT WR and TR.
 - First study to demonstrate this in a multicultural population.
 First study to demonstrate this across different treatment areas.

Reference

Boldrini, L, et al, Coping with modesty during radiotherapy for breast cancer: a multicentric study. Breast Cancer Research and Treatment, 2024. DOI: 10.1007/s10549-024-07365-z.

- Modesty appears to be a minor factor affecting WR unease.
- WR unease is strongly associated with TR unease.
- More work is needed to understand causes of WR unease.

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