



# Work Package 5

## Perceptions of patients on the role and skills of the Therapeutic Radiographer (RTT)

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Polskie Towarzystwo Elektoradiologii

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# Overview



- Background
  - Summary of systematic review
- Work Package 5 Methodologies
  - Survey ‘Service Users’ Perspectives of Undergoing Radiotherapy – the Patient’s Voice’
  - Patient interviews
- Analysis & Results
- Limitations, conclusions & recommendations

# WP5 Patient Perceptions

AIM: Investigate and identify the perceptions of patients/service users on the role and skills of therapeutic radiographers

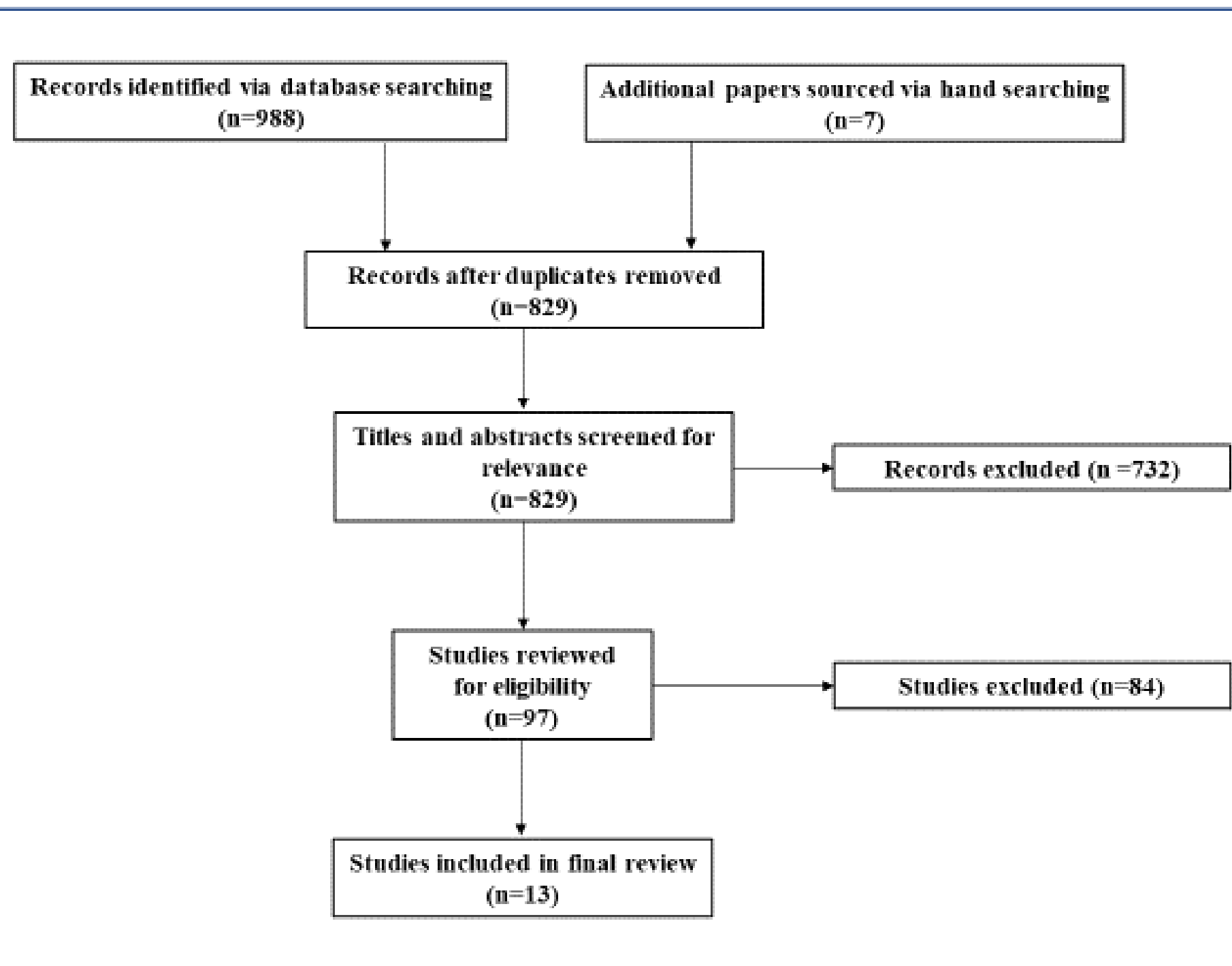


Source: <https://www.safeeurope.eu/work-packages/patient-perceptions/>



## BACKGROUND

# Systematic literature review: Patient perspectives on their engagement with radiation therapists: A Systematic Literature Review



- PEO strategy (Population, Exposure, Outcome)
- PRISMA guidelines
- Review completed September'21-March'22
- 13 studies included
- Methodologies – 10 survey, 3 interview
- Total patients 11,421 (range 11-8069)
- 7 studies specifically on RTTs (n=347)
- Manuscript in draft

## Main findings

- RTTs can have a negative or positive impact on patient experience/patient satisfaction during radiotherapy (Mentally, emotionally and physically)
- Patient perception of RTTs can be a strong predictor for overall satisfaction in radiotherapy
- Patient relationship with RTT is influenced by; time spent with them, continuity of care, person-centredness of communication and also the radiotherapy environment.
- Palliative and H&N cancer patients' express less positive experiences
- More research by RTTs to identify patient needs and how these are/are not met and how the unique expertise of RTTs can be fully utilised for the benefit of patients'
- Heterogeneity in methodologies apparent in this review presents an opportunity for RTTs to develop specific patient experience survey
- Additional training and support at undergraduate level and as CPD: advanced communication/interpersonal skills, patient psychology and emotional intelligence



Polskie Towarzystwo Elektryczności

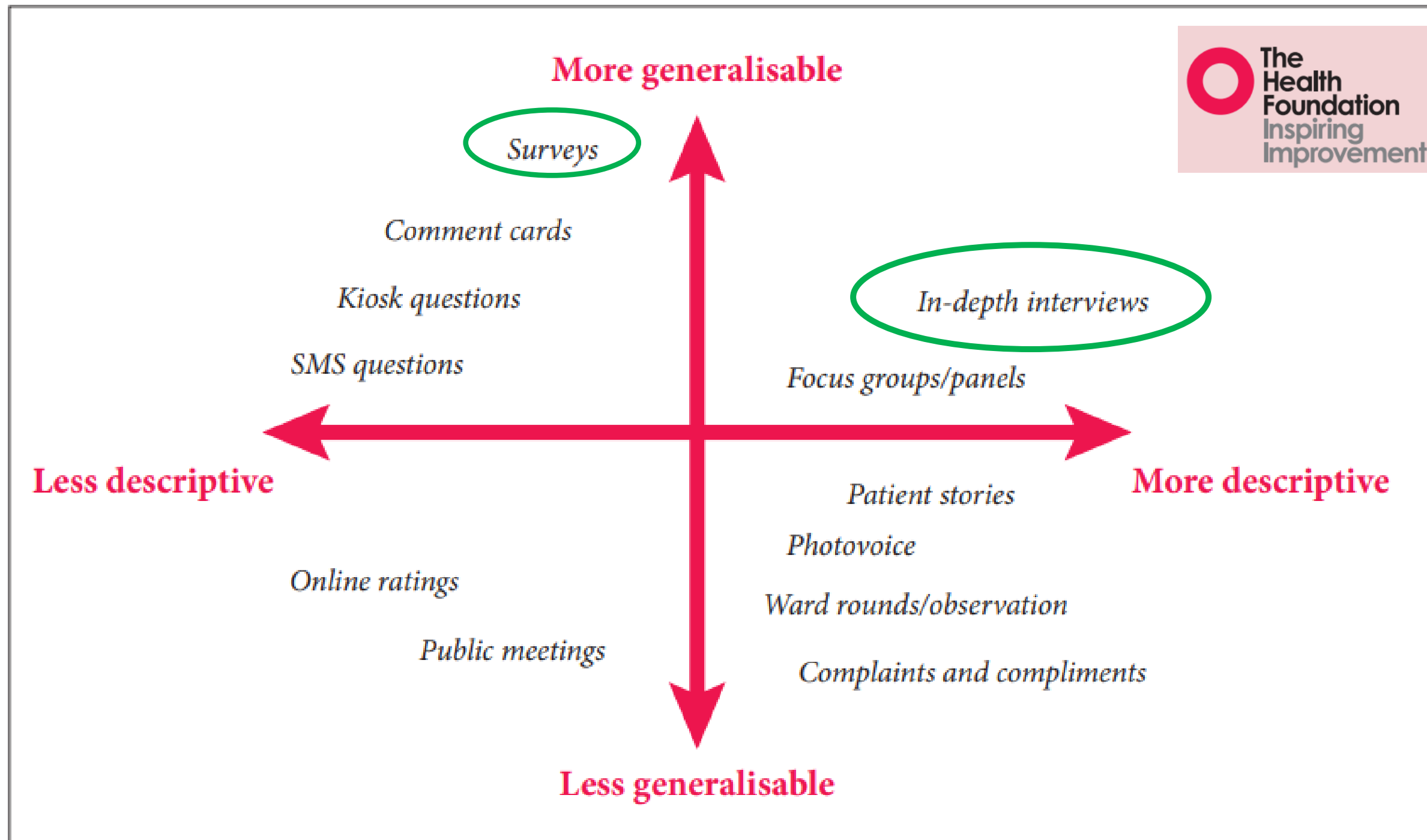
# SAFE EU WP5 Patient Perceptions

## Summary of study and results to date

SAFE EUROPE Radiotherapy Final Conference  
May 5<sup>th</sup>, 2022  
Radisson Scandinavia Hotel, Copenhagen / Online



# Methodology



Source: The Health Foundation Inspiring Improvement. No.18 Measuring patient experience © 2013 Health Foundation

# Methodology: Survey

## Part I

- Demographics
- Diagnosis
- Treatment intent
- Time spent with therapeutic radiographer (approx.)
- Location

## Part II

- Recognised survey<sup>1</sup> consisting of 23 statements relating to aspects of care experience
- Participants rank response strongly agree, agree, neutral, disagree and strongly disagree based on the original Likert scale<sup>2</sup>
- Final question asks if they would like to be interviewed about their experience

1. Slater, P., McCance, T. & McCormack, B. (2017) *The development and testing of the Person-centred Practice Inventory – Staff (PCPI-S)*. *International Journal for Quality in Health Care*, 2017, 29(4), 541–547.
2. Likert, R. (1932). *A technique for the measurement of attitudes*. *Archives of Psychology*, 22 140, 55.

# SURVEY TITLE: Service Users’ Perspectives of Undergoing Radiotherapy – the Patient’s Voice

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Q8

Please indicate how much you agree or disagree with each of the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Staff make me feel safe during my treatment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff work together and share information as required, about my care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff discuss my communication with me (e.g. hearing impairment) as part of my care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Add page break

Q11

Please indicate how much you agree or disagree with each of the following statements

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Staff make an effort to understand what is important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff use my personal experiences to build a relationship with me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff involve me in making decisions about my care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff consider my home environment in meeting my care needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



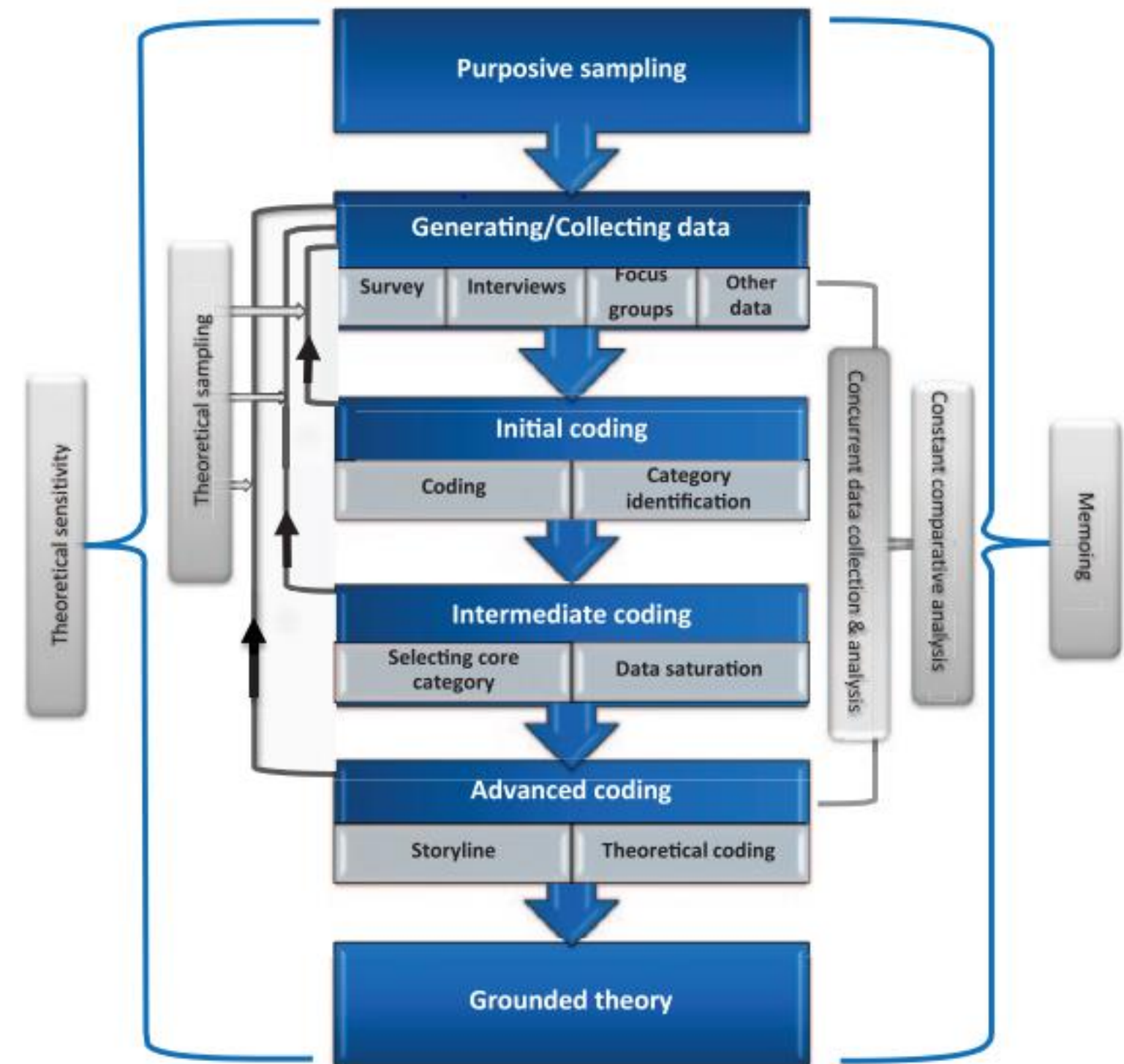
# Methodology: Patient Interviews

- Semi-structured interview guide
- Led by therapeutic radiographer researcher
- Conducted in clinical departments or remotely via Teams
- Audio/visually recorded
- Independently transcribed
- Analysed using a 'Grounded Theory' approach



# Grounded Theory

- Methodology for analysis of systematically generated qualitative research data<sup>3</sup>
- Interview transcripts
- Process of coding data by 2 independent researchers facilitated by NVivo
- Constant comparative analysis
- Iterative process of comparing initial codes and emerging codes as data accrues
- Data saturation
- Grounded theory



Reproduced from: Chun Tie et al Grounded theory research: A design framework for novice researchers. SAGE Open Medicine Volume 7: 1–8



# Recruitment

- Patient information sheet/survey offered in clinical departments
- Study poster on social media
- Hard copy or electronic completion
- Patient Information sheet and informed consent embedded within survey
- On completion of survey invited for interview
- Contact details given
- Contacted by researcher and interview arranged

**Have you recently received  
Radiotherapy and want to share your  
experience??**

If you are receiving or have received radiotherapy treatment for cancer within the last 2 years, we are interested in hearing from you about your experience of the staff who provided this treatment.

To complete the relevant questionnaire, please go to the following link:  
[https://ulsterhealth.eu.qualtrics.com/jfe/form/SV\\_b2i9uD6gan1GxcW](https://ulsterhealth.eu.qualtrics.com/jfe/form/SV_b2i9uD6gan1GxcW)

If you have questions or would like further details of the study, please contact Ms. Terri Flood, in the research team in Ulster University at [t.flood@ulster.ac.uk](mailto:t.flood@ulster.ac.uk)



**This study is being conducted by Ulster University and has been approved by the Ulster University Ethics Review Committee.**





# Inclusion/Exclusion Criteria

- Inclusion
  - Oncology patients currently receiving or who have received radiotherapy within the last 24 months
  - $\geq 18$  years
  - Patient deemed fit to participate by their local healthcare provider
- Exclusion
  - $< 18$  years
  - Patients deemed by their local healthcare provider not fit to participate

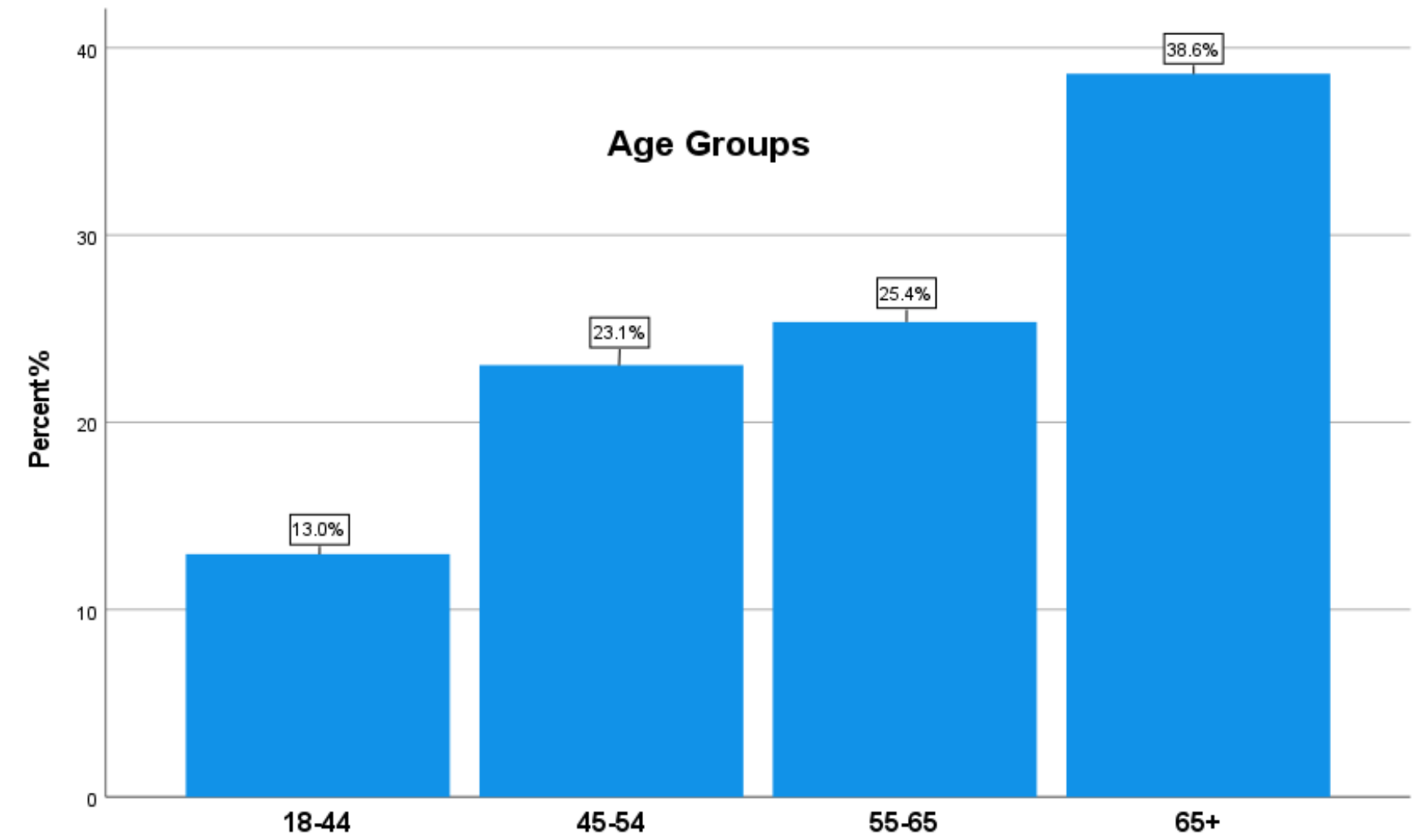
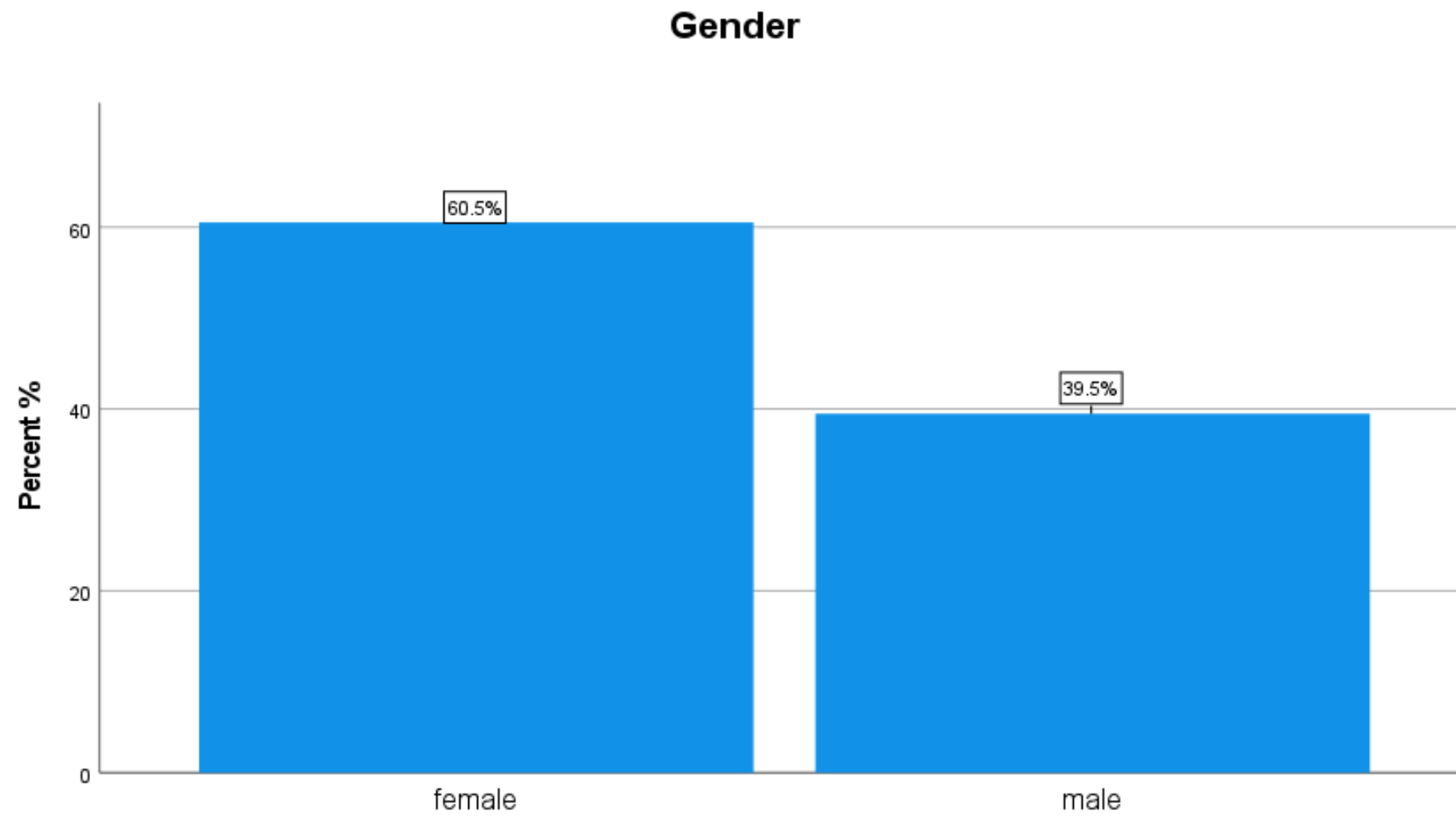


# SURVEY RESULTS

SAFE EUROPE Radiotherapy Final Conference  
May 5<sup>th</sup>, 2022  
Radisson Scandinavia Hotel, Copenhagen / Online

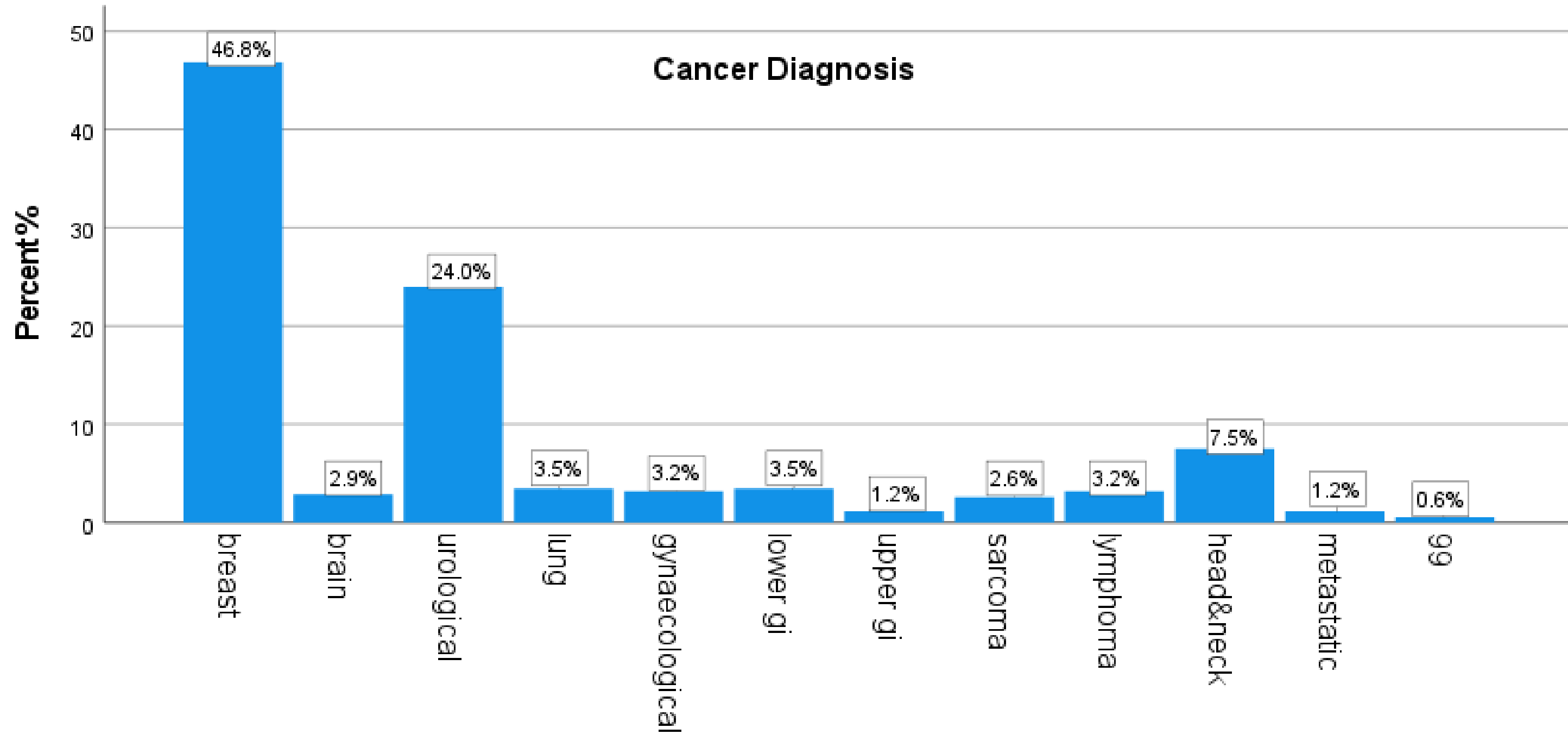


# Patient's Voice Survey (n=347)

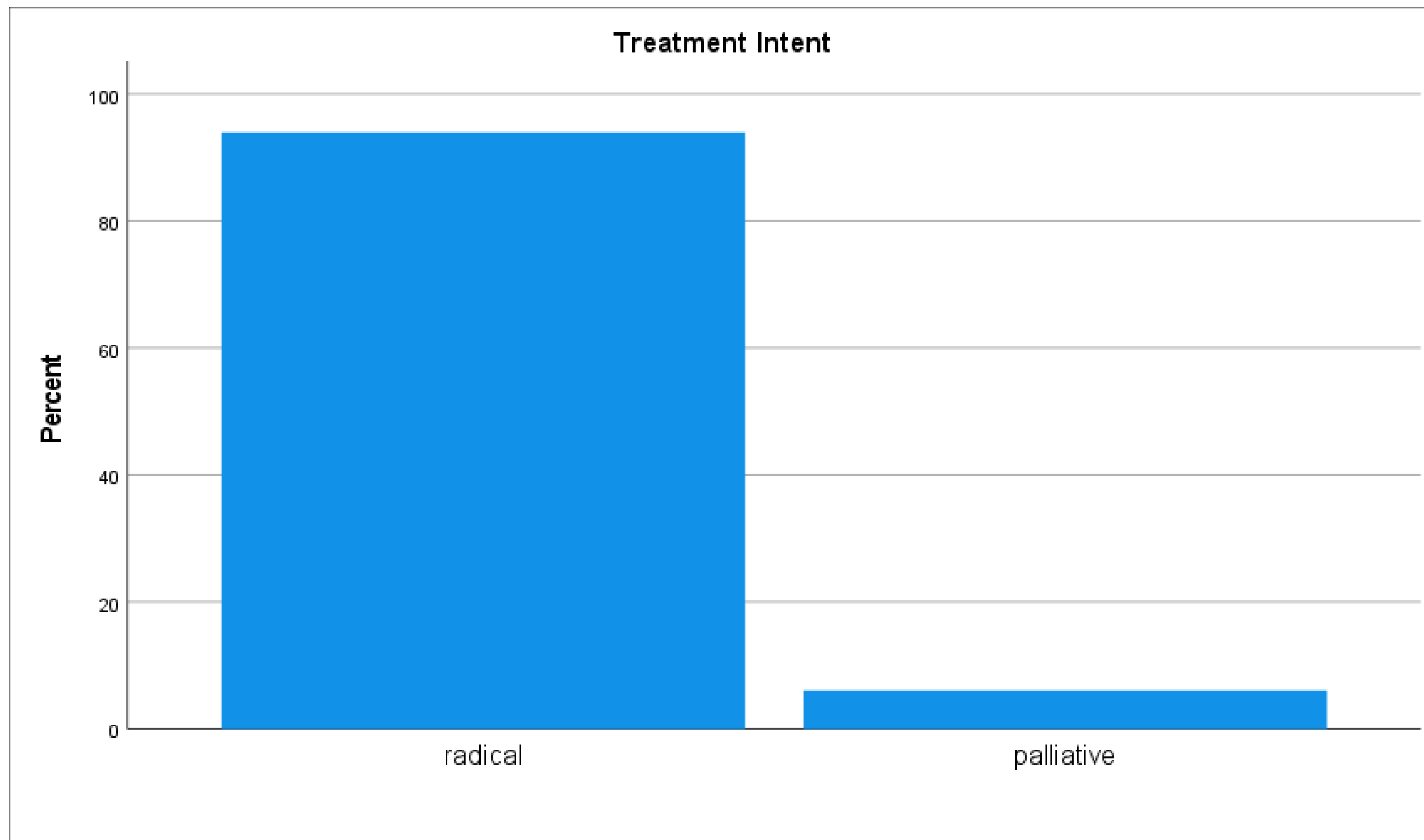




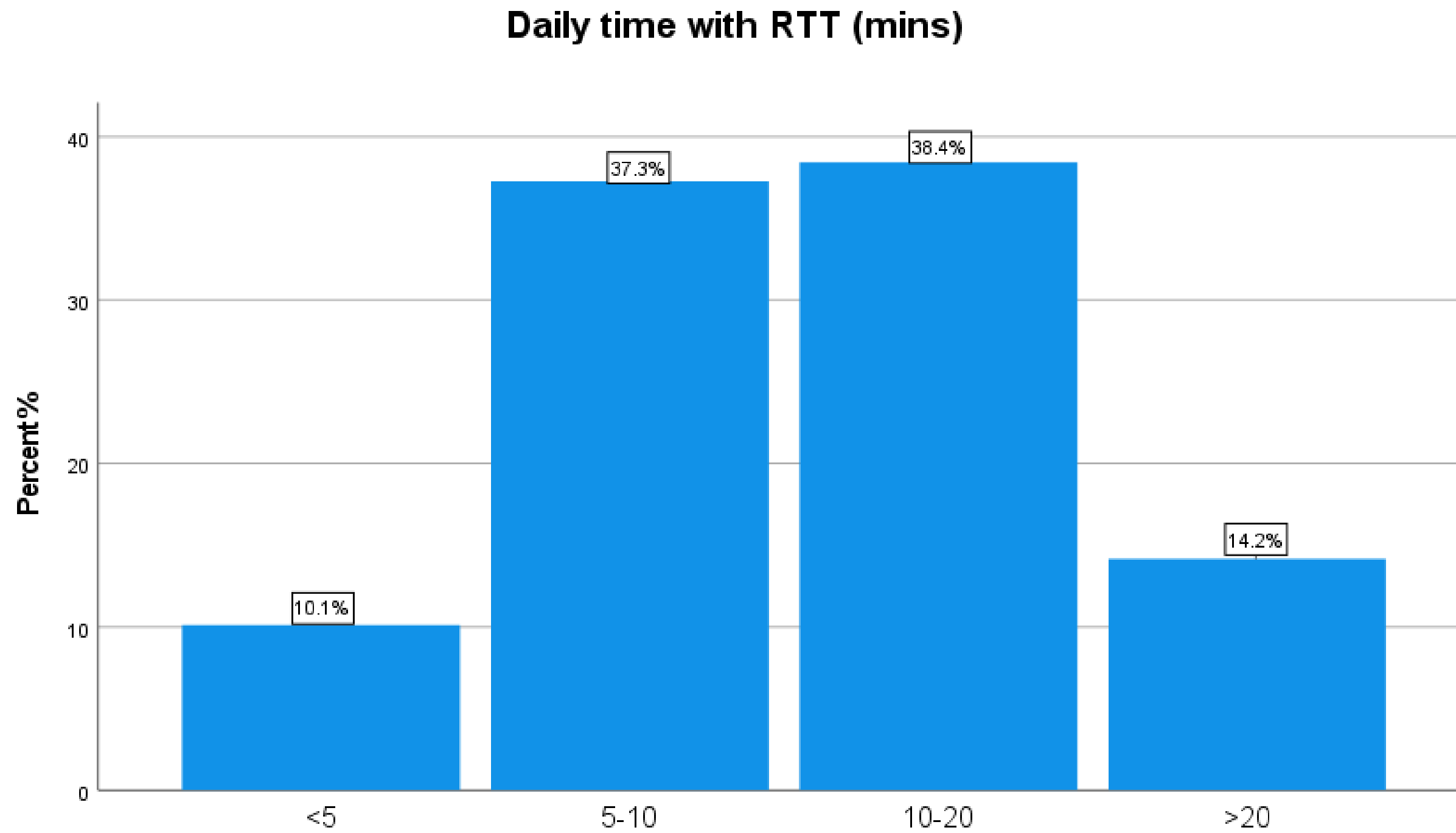
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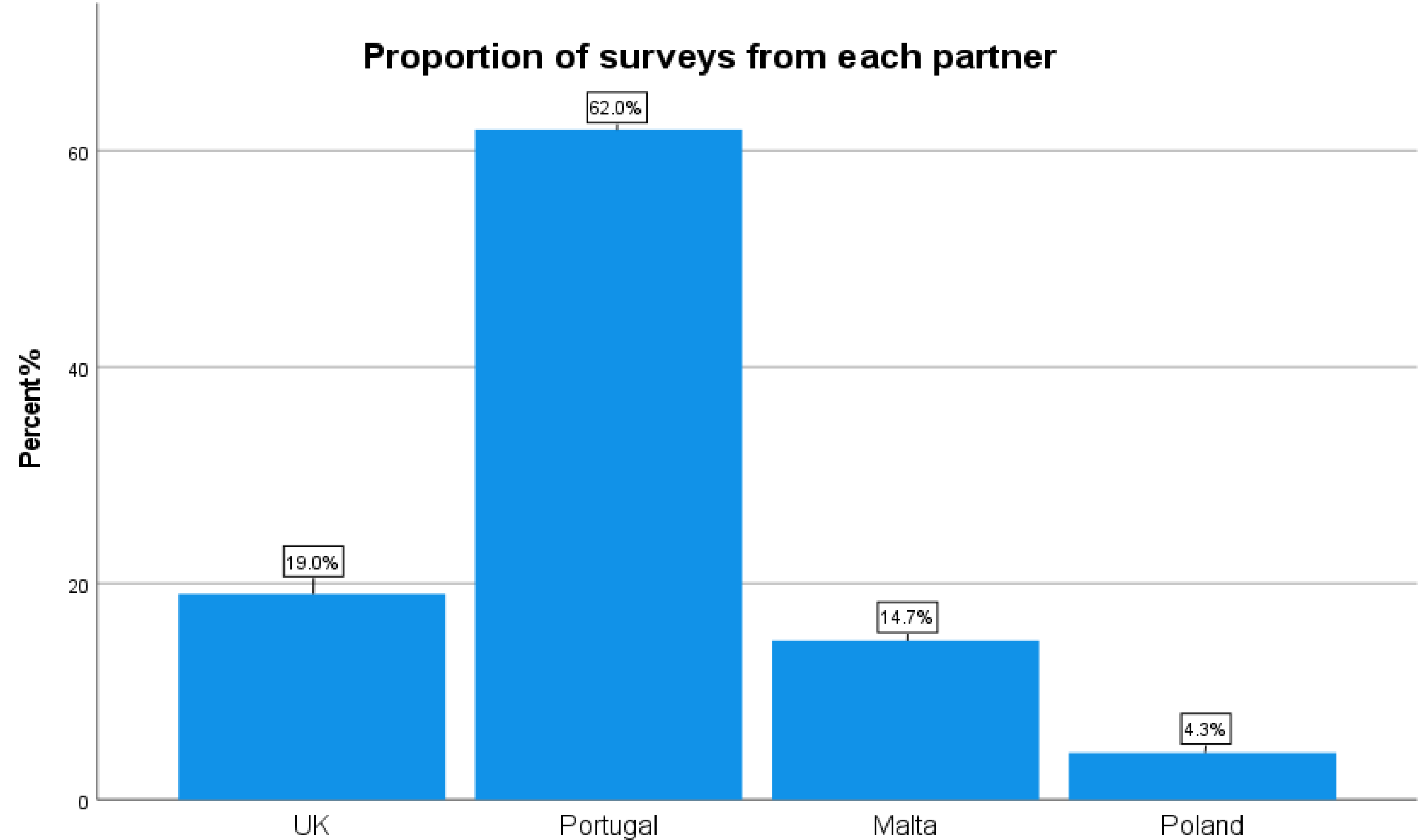


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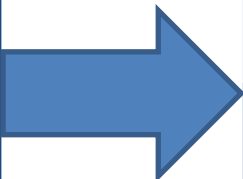
# Service Users' Perspectives of Undergoing Radiotherapy – the Patient's Voice

## 23 Likert statements

- Staff make me feel safe during my treatment
- Staff work together and share information as required, about my care
- Staff discuss my communication needs with me (e.g. hearing impairment) as part of my care
- Staff make an effort to understand what is important to me
- Staff use my personal experiences to build a relationship with me
- Staff involve me in making decisions about my care
- Staff consider my home environment in meeting my care needs
- Staff give me their full attention when they are with me
- I feel able to say to staff what is important to me
- I feel able to give staff feedback about my experience of being cared for
- Staff ask me about my life
- Staff connect with me as a person
- Staff ask me if I have all the information I need
- Staff don't assume they know what is best for me
- When we disagree about my care, staff try to find common ground
- My family are included in decisions about my care only when I want them to be
- In caring for me, staff use what they know about me as a person
- I feel cared for
- Staff respond compassionately when I am upset or unhappy
- Staff help me to express my concerns about my treatment and care
- Staff listen to me and hear what I have to say about my care
- Staff understand my circumstances when caring for me
- Staff help me to set realistic goals

# Analysis of Likert statements

<b>Staff make me feel safe during my treatment</b> <i>key statement</i>
Staff work together and share information as required, about my care
Staff discuss my communication needs with me (e.g. hearing impairment) as part of my care
Staff make an effort to understand what is important to me
Staff use my personal experiences to build a relationship with me
<b>Q11_3Staff involve me in making decisions about my care</b> <i>key statement</i>
Q11_4Staff consider my home environment in meeting my care needs
Q11_5Staff give me their full attention when they are with me
Q11_6I feel able to say to staff what is important to me
<b>Q11_7I feel able to give staff feedback about my experience of being cared for</b> <i>key statement</i>
Q11_8Staff ask me about my life
<b>Q11_9Staff connect with me as a person</b> <i>key statement</i>
Q11_10Staff ask me if I have all the information I need
Q11_11Staff don't assume they know what is best for me
Q11_12When we disagree about my care, staff try to find common ground
Q11_13My family are included in decisions about my care only when I want them to be
Q11_14In caring for me, staff use what they know about me as a person
<b>Q11_15I feel cared for</b> <i>key statement</i>
Q11_16Staff respond compassionately when I am upset or unhappy
Q11_17Staff help me to express my concerns about my treatment and care
Q11_18Staff listen to me and hear what I have to say about my care
Q11_19Staff understand my circumstances when caring for me
Q11_20Staff help me to set realistic goals



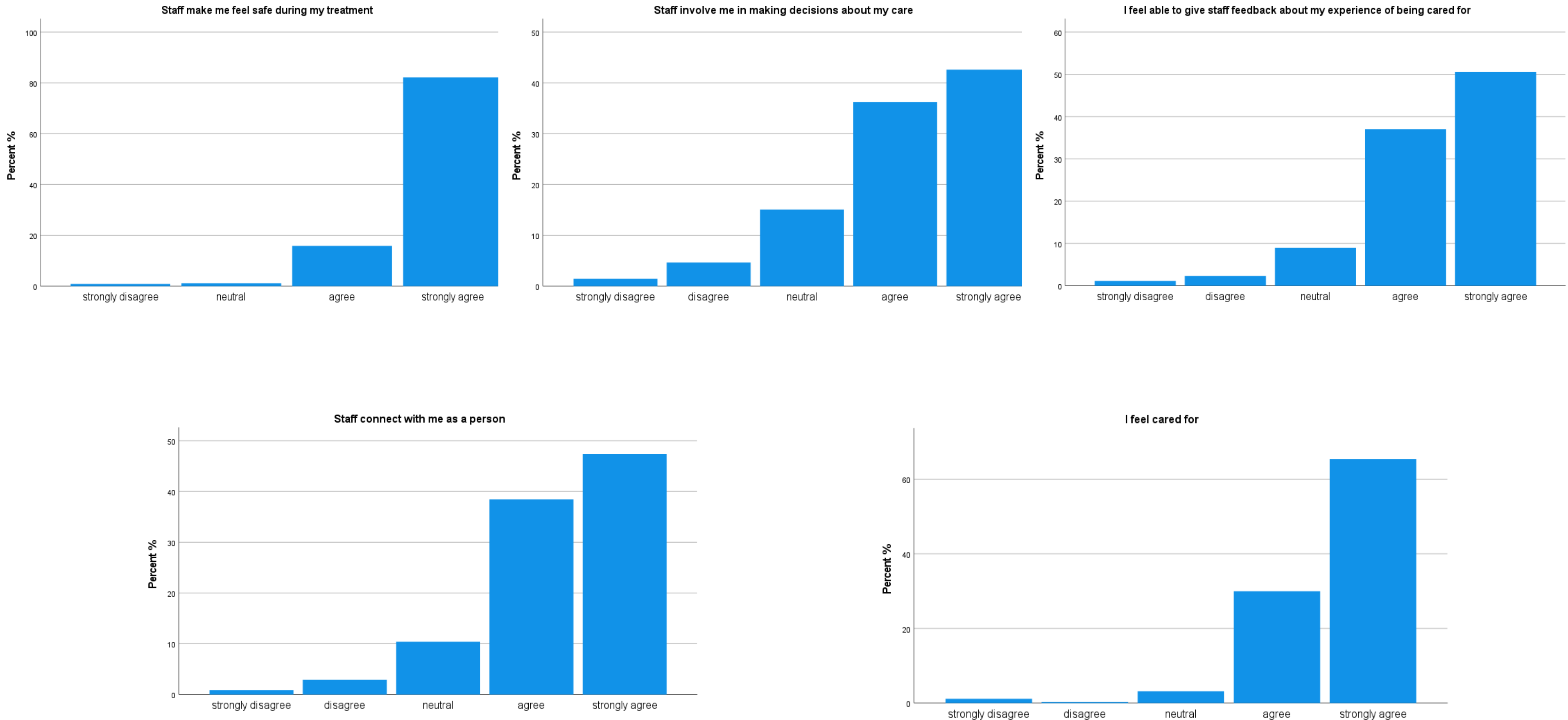
Questions categories	Key representative statement
<b>Feeling safe</b> Q8_1 Q8_2 Q8_3	Staff make me feel safe during my treatment
<b>Decision making</b> Q11_3, Q11_10 -13, Q11_20	Staff involve me in making decisions about my care
<b>Expressing feedback/concerns</b> Q11_6, Q11_7, Q11_17, Q11_18	I feel able to give staff feedback about my experience of being cared for
<b>Interpersonal relationship</b> Q11_1, Q11_2, Q11_5, Q11_8	Staff connect with me as a person
<b>Being cared for</b> Q11_4, Q11_14, Q11_15, Q11_16, Q11_19	I feel cared for

## Analysis: 5 key Likert statements

Key statement
Staff make me feel safe during my treatment
Staff involve me in making decisions about my care
I feel able to give staff feedback about my experience of being cared for
Staff connect with me as a person
I feel cared for



# Survey responses for key Likert statements



# Statistical Analysis

Likert Statement	Variable	Groups	Statistical tests (non-parametric)	Null Hypothesis ( $H_o$ )
Staff involve me in making decisions about my care	Gender	Male, female, other	Mann Whitney U	No difference in agreement between male and female
Staff make me feel safe during my treatment	Age group	18-44, 45-54, 55-65, >65	Kruskal-Wallis H	No difference in agreement between age groups
I feel able to give staff feedback about my experience of being cared for	Diagnosis	Breast, Urological, Other	Kruskal-Wallis H	No difference in agreement between diagnosis groups
Staff connect with me as a person	Time spent with RTT	<5, 5-10, 10-20, >20	Kruskal-Wallis H	No difference in agreement based on how long spent with RTT
I feel cared for	Country	UK, Portugal, Malta, Poland	Kruskal-Wallis H	No difference in agreement between countries

## Results - $p$ Values

5 Key Likert statements	Gender	Age	Diagnosis	Country	Time spent with RTT
1. Staff make me feel safe during my treatment	0.02*	.270	.001*	.001*	.065
2. Staff involve me in making decisions about my care	0.03*	.002*	.002*	.001*	.007*
3. I feel able to give staff feedback about my experience of being cared for	.331	.046*	.571	.001*	.106
4. Staff connect with me as a person	0.072	.004*	.018*	.001*	.029*
5. I feel cared for	.001*	.052	.002*	.001*	.360

$p - 0.05$

# Results

Likert Statement
Staff make me feel safe during my treatment
Staff involve me in making decisions about my care
I feel able to give staff feedback about my experience of being cared for
Staff connect with me as a person
I feel cared for

- **Age** – 18-44 and >65 groups appear to agree more with statements 2 and 4 than those 45-65
- **Gender** - Males agreed more than females across all 5 key Likert statements
- **Diagnosis** – Breast cancer patients agreed less than urological cancer patients and other cancer patients across all 5 key Likert statements
- **Time with RTT** – Patients reporting 10-20 mins or >20 mins agree more across all 5 Likert statements
- **Country** – Significant differences in agreement detected. Post hoc analysis required to establish exactly where the differences are.



# Limitations

- Variation in sample size with some counties having a relatively small return
- Variations in mode of survey completion – face to face versus on-line completion
- Likert scale limitations
- Sources of bias – Recall, population bias, acquiescence, central tendency
- Non-parametric tests less powerful than parametric

# Conclusions & Further Analysis

- Overall patients report positive experiences in relation to therapeutic radiographers
- Statistically significant differences exist between radiotherapy patients depending on their gender, age category, diagnosis, country and time spent with RTT, in relation to the 5 key aspects of their experience of RTTs
- Further analysis
  - Test correlations between Likert statements
  - Post hoc analysis on differences between countries

# Patient Interviews

- Coding & analysis ongoing
- 48 interviews completed
- Average interview duration 40mins(20mins – 90mins)
- Collaboration to share coding methodology between partners

## 4 Main Themes identified to date

1. Information provided Pre-CT Simulation

2. CT Simulation: Radiographer Interactions

3. Treatment: Radiographer Interactions

4. Information provided at the end of radiotherapy

# Sample of Preliminary interview findings

- For many patients strong trust in their radiographers developed as a result of the effective communication by radiographers during treatment.
- Radiographers were very knowledgeable and helpful throughout treatment regarding their side-effects. Concerns raised regarding side-effects, could have been resolved with clear effective communication.
- Consistency of the radiography team is highly important and valued by patients. Those experiencing longer radiotherapy schedule benefitted more from this consistency.
- Radiographers need to adapt their communication to the individual



# WP5 Preliminary Recommendations for Practice

## Educational

- Training and support at UG/PG level and as CPD
  - advanced communication/interpersonal skills
  - patient psychology
  - emotional intelligence
- Research methods
  - Qualitative research
  - Survey design

## Research

- Perspectives/experience of specific cancer patient groups of RTTs
- Specific patient survey tool to explore how unique expertise of RTTs fully utilised for patient benefit
- RT environment/models of working that facilitate more person-centred care (quality time and continuity of care)



Polskie Towarzystwo Elektryczności

Thankyou | Dziekuje | Grazie | Gracias |  
Grazzi | Go raibh maith agat | Obrigado | Tak

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## **Interview Schedule:**

### **Service Users' Perspectives of Undergoing Radiotherapy – the Patient's Voice**

The interviewer should review participant survey responses prior to the interview and use these responses to understand the participant's diagnosis and experience prior to conducting the interview.

#### **Introduction**

Tell me about your involvement with radiotherapy services....

1. Is this the first time that you have received radiotherapy?
2. Within which city did you receive radiotherapy treatment?
3. Did you have any chemotherapy/surgery/other treatment prior to/during your radiotherapy?

#### **Experiences of Radiotherapy treatment**

4. Can you provide an overview/summary of your radiotherapy experience highlighting the most positive and negative aspects for you?

Prompts:

- Who attended with you
- Did you have a named therapy radiographer?
- Did you see the same therapy radiographers each day?
- How did you feel in the CT sim/treatment room/on the couch/during delivery?

- How did you feel about the provision made to meet your specific needs? - undressing/dignity/claustrophobia (if relevant)?
- Did you feel informed about what was happening at each stage of treatment?

#### **Engagement with Therapeutic Radiographers**

5. How did therapeutic radiographers engage and communicate with you?

Prompts:

- Did they talk about things that were important to you?
- Did they encourage you to talk openly about your concerns?
- Did you feel that they were informed about your cancer and overall management?
- How important was/is this engagement for you?
- Did you feel that you had enough time each day with them to express your concerns?
- Did you feel the treatment team communicated effectively with each other?

6. On completing your radiotherapy, were you encouraged to contact your therapy radiography team if you had any concerns?

7. Did you see a specialist therapy radiographer before, during or after completing your radiotherapy e.g. I&S, Breast, GI, H&N.

8. What has been the impact of your engagement experience?

9. Would you change anything about this engagement?

10. Were you aware of the role of the therapeutic radiographer prior to having radiotherapy?

(If the participant has previously received radiotherapy, enquire regarding what (if any) aspects of their experience with the radiographers was different)