

Article

Not peer-reviewed version

# Exploring Patient Experiences: A Qualitative Analysis of Follow-up Radiology in Cutaneous Melanoma

 $\underline{Laura\ lacorossi}\ , \underline{Simona\ Molinaro}\ , \underline{Gambalunga\ Francesca}^*\ , \underline{Flora\ Desiderio}\ , Francesca\ Piacentini\ , \\ \underline{Antonino\ Guerrisi}\ , \underline{Fulvia\ Elia}\ , \underline{Mauro\ Caterino}$ 

Posted Date: 18 February 2025

doi: 10.20944/preprints202502.1176.v1

Keywords: cutaneous melanoma; emotional distress; patient experience; diagnostic imaging; psychological adaptation; qualitative research



Preprints.org is a free multidisciplinary platform providing preprint service that is dedicated to making early versions of research outputs permanently available and citable. Preprints posted at Preprints.org appear in Web of Science, Crossref, Google Scholar, Scilit, Europe PMC.

Copyright: This open access article is published under a Creative Commons CC BY 4.0 license, which permit the free download, distribution, and reuse, provided that the author and preprint are cited in any reuse.

Disclaimer/Publisher's Note: The statements, opinions, and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions, or products referred to in the content.

Article

# Exploring Patient Experiences: A Qualitative Analysis of Follow-up Radiology in Cutaneous Melanoma

Iacorossi Laura <sup>1</sup>, Simona Molinaro <sup>2</sup>, Gambalunga Francesca <sup>3,\*</sup>, Flora Desiderio <sup>4</sup>, Francesca Piacentini <sup>4</sup>, Antonio Guerrisi <sup>4</sup>, Fulvia Elia <sup>4</sup> and Mauro Caterino <sup>4</sup>

- <sup>1</sup> Department of Life, Health and Health Professions Sciences Link Campus University 00165 Rome
- <sup>2</sup> Thoracic Surgery Unit IRCCS "Regina Elena" National Cancer Institute Via Elio Chianesi, 53 00144 Rome Italy –
- <sup>3</sup> Professional Health Care Services Department University Hospital "Policlinico Umberto I", Rome
- <sup>4</sup> Radiology and Diagnostic Imaging Unit, Department of Clinical and Dermatological Research, San Gallicano Dermatological Institute IRCCS, Via Elio Chianesi 53, Rome, 00144, Italy
- \* Correspondence: Francesca Gambalunga PhD, MsC, RN Professional Health Care Services Department University Hospital "Policlinico Umberto I", Rome mail: f.gambalunga@policlinicoumberto1.it

Abstract: Background/Objectives: Diagnostic examinations that cutaneous melanoma (CM) patients undergo during follow-up can generate various emotional states related to the possibility of recurrence or disease progression. Understanding the emotions and perceptions of patients during the wait for diagnostic exams is crucial for improving care. This study aims to explore the experiences of CM patients awaiting follow-up diagnostic investigations. Methods: This is a qualitative descriptive inductive, single-center study, structured according to COREQ criteria. The sample of CM patients was recruited at the UOSD of Radiology and Diagnostic Imaging ISG of the IFO in Rome. Data was collected through semi-structured interviews and analyzed using Framework Analysis, as described by Ritchie and Spencer. Results: A total of 30 patients with an average age of 57.4 were recruited. The interviews revealed the following four themes: waiting influences the emotional experience; the double face of family support; strategies of support during the waiting period; waiting requires attention to the person and the environment. Conclusions: Healthcare professionals need to recognize and address patients' emotional dynamics to improve care. Training healthcare staff, psychological intervention, and technological innovation can improve the waiting experience, foster a more welcoming and reassuring environment, and enhance patients' psychological wellbeing and satisfaction with care pathways.

**Keywords:** cutaneous melanoma; Emotional Distress; patient experience; Diagnostic Imaging; Psychological Adaptation; qualitative research

#### 1. Introduction

Cutaneous melanoma (CM) is one of the most common cancers among young people, ranking as the second most common cancer among men and the third among women under 50 in Italy [1]. According to the latest AIOM estimates, around 12,700 new cases of melanoma were registered in 2022, with an annual increase in incidence of 4.4% in men and 3.1% in women [1]. Incidence rates vary significantly from north to south, with rates up to twice as low in southern regions [1]. Internationally, Northern European countries like Norway and Sweden have the highest rates [2]. Over the last 40 years, the incidence of CM has increased sixfold, especially among fair-skinned individuals [3,4].

Early detection of primary CM, recurrences, and locoregional metastases is crucial for patient prognosis, proving to be more effective than any adjuvant therapy [5]. About 10% of patients develop

recurrences, 85% of which occur within five years from the excision of the primary tumor [5]. For this reason, specific staging and follow-up pathways have been established, which vary based on the histological characteristics of the melanoma. The main instrumental examinations include ultrasounds, Total Body CT scans with contrast, and PET/CT scans [6]. Ultrasound is often the first choice for lymph node assessment due to its non-invasiveness and resolution in superficial tissues [7,8]. CT scans remain the gold standard for staging advanced melanomas and monitoring therapy.

Although most studies have focused on the clinical and therapeutic aspects of CM, very little data exist on the emotional and psychological impact the disease has on patients, particularly before diagnostic investigations, whose results can significantly influence prognosis and therapy options. Some studies have highlighted a low impact of CM on the physical domain but high levels of distress and anxiety, especially at the time of diagnosis [9,10], alongside negative feelings related to the fear of recurrence and lifestyle changes [11]. In a study on patients with metastatic CM, anxiety and discomfort were generally low except during PET scans, which seemed to cause greater distress [12].

The role of healthcare professionals, particularly nurses, is crucial in alleviating patient suffering and anxiety while awaiting a diagnosis. Nurses, with their expertise and empathy, can provide significant psychological support by listening to the concerns of patients, explaining the diagnostic process, and offering comfort when needed [13,14].

Despite the importance of this topic, in-depth data on the perceptions and emotions of patients with CM awaiting follow-up diagnostic investigations is lacking. This study aims to explore the real-life experience of patients with CM before undergoing follow-up diagnostic examinations (Ultrasound, CT, PET, MRI). The objective is to better understand the emotions and perceptions of these patients during this critical period and to improve the quality of care by providing comprehensive support that integrates both clinical and psychological needs. This approach could contribute to developing more targeted and personalized strategies to reduce emotional discomfort and improve the overall well-being of patients during treatment and follow-up.

### 2. Materials and Methods

Study Design

This is a descriptive, inductive, single-center qualitative study [15], structured according to established criteria for qualitative research reporting (COREQ) [16,17].

Sample and Setting

The sample consisted of patients with cutaneous melanoma who were referred to the UOSD Radiology and Diagnostic Imaging unit at the ISG-IFO of Rome, regardless of the stage of the disease. Inclusion criteria were: being over 18 years of age, having a histologically confirmed melanoma diagnosis, being scheduled for a radiological investigation (Ultrasound, CT, MRI), and agreeing to participate in the study (written informed consent). Patients with cognitive impairments or pathological conditions that could hinder active participation in the study were excluded. To identify these patients, medical records were reviewed, and consultations with attending physicians were conducted to ensure potential participants met the inclusion criteria. The sampling was proactive to take advantage of personal experiences of the phenomenon being studied [18]. This approach allows for a comprehensive understanding of the subject of the study, thanks to the participants' availability, willingness to engage, and their ability to express their experiences reflectively and articulately [19]. The sample size was determined based on the principle of data saturation. Data saturation, as proposed by Guest et al. [20], emphasizes the importance of reaching a point where no new information or significant themes emerge from the collected data.

Data Collection

Semi-structured interviews guided by key questions (Table 1) were conducted to explore the phenomenon under investigation. Researchers encouraged participants to share their experiences spontaneously, concluding the interview with a final question asking them for suggestions. Interviews took place in a dedicated room, ensuring a disruption-free environment that provided comfort and confidentiality to the participants.

This section may be divided into subheadings. It should provide a concise and precise description of the experimental results, their interpretation, and the experimental conclusions that can be drawn.

#### **Table 1.** Guiding questions for interviews.

- Could you share with us how you are experiencing the waiting period before undergoing a diagnostic radiology investigation?
  - o If positive:
    - What factors contributed to this positive experience? What obstacles could have affected this experience?
  - o If negative:
    - What factors made this experience negative? What factors could have helped to improve the experience?
- Do you have any suggestions for improving the patient waiting period before a diagnostic radiology investigation?

The interviews were conducted by two nurses experienced in qualitative research, who managed the patient recruitment, explained the objectives of the study, and collected the data. Patients were invited to carefully read and sign the informed consent form to ensure an informed decision regarding their participation. The questions were tested on the first two participants and did not require any modifications, as they were clear and enabled participants to effectively share their experiences. Data collection continued until no new information emerged (data saturation).

Before the interview, participants completed a demographic data form (age, gender, education level, marital status, occupation, family structure, number of children) and clinical information (disease, previous oncological therapies, current treatment, type and reason for the investigation). Interviews were conducted individually, audio-recorded, and later transcribed verbatim using the "smooth verbatim transcription" technique.

#### Data Analysis

The data was analyzed using the Framework Analysis approach. This method allows the researcher to explore the data in-depth while maintaining effective and transparent control, improving the rigor of the analytical process and the credibility of the results.

Framework Analysis, as described by Ritchie & Spencer [21], is an analytical process consisting of five distinct, highly interconnected stages: familiarization, identifying a thematic framework, indexing, charting, and mapping and interpretation [22].

Interviews were listened to and transcribed by two researchers. Each researcher independently reviewed each interview several times, noting key concepts and recurring themes (familiarization phase). The ideas and themes that emerged were analyzed concerning the study's objectives and the interview guide questions. To ensure accuracy and facilitate deeper analysis, data was organized into categories (indexing). A summary of the categories was then drafted under each main theme (charting). Charts were used to outline the relationship between themes and categories, allowing for a better understanding of the phenomenon (mapping and interpretation).

Researchers engaged in ongoing discussions to reach a consensus on these core elements and their interconnections. Data was coded and categorized independently by three researchers, while

other researchers verified the consistency of these codes, categories, subthemes, and themes. Data analysis was conducted using the qualitative analysis software N-VIVO (Table 2).

Table 2. Example of the coding process in inductive analysis.

Codes	Categories	Themes
"I feel awful because the wait is long there are many thoughts running through my mind" (I18)  " I'm still waiting for them to call me for the CT scan" (I22)  " the waiting time is long the wait has always been devastating" (I18)  "The waiting times entering and finding out you have to wait another half hour is un-bearable. That half hour feels endless." (I2)	Negative Aspects	
"since it's an ultrasound where I have to drink, it stresses me a little because I'm not sure if my bladder will be full or if I'll be able to hold it." (I17)  " the wait creates anxiety will I be able to do the bladder ultrasound?" (I23)  "If something negative comes up, of course, it would lead to a spiral of worries." (I6)  "If there are significant changes in the report, I would be worried" (I29)  " you don't know if there is something wrong or not, and this creates a state of fear, a constant sense of suspense there's no one to tell you everything is fine." (I24)	Anxiety About Preparation and results	Waiting Affects the Emotional Experience
"The fear of recurrence" (I10)  " So I'll have to remove the tumor, I'll have to go through the whole process again, and so some fear comes in" (I15)  " fear of what lies ahead, knowing that these melanomas can cause metastases" (I19)	Fear of Recurrence	

#### Reliability and Validity

To ensure the reliability and validity of the results, various strategies were implemented following the paradigm proposed by Lincoln and Guba [23,24]. Regular meetings among the research team facilitated open discussions, allowing for the identification and mitigation of potential personal biases, contributing to the study's credibility. Every stage of the research was documented in detail to enable other scholars to replicate the investigation, ensuring reliability. Internal consistency was maintained by sharing the results among researchers using triangulation. The cross-review technique was adopted, where two less involved researchers analyzed the process by comparing the themes and subthemes that emerged with the original texts. To ensure transferability, clear details about the participants will be provided, allowing readers to apply the results and conclusions to other contexts.

#### **Ethical Considerations**

Before the start of the study, approval was obtained from the Lazio Area 5 Territorial Ethics Committee – Experimental Protocol Registry No. 40/ISG/23 on 20/09/2023. Patients who met the inclusion criteria were informed about the objectives of the study and the data collection methods. They were then invited to carefully read the informed consent form to ensure an informed decision was made regarding participation. After written informed consent, data was collected, processed,

and stored anonymously to ensure the security and confidentiality of the information of the population involved.

#### 3. Results

Thirty patients were interviewed, and the average length of the interview was 24 minutes. The interviewed sample consisted mostly of men (n=20; 66.67%), with an average age of 57.4 years, married (n=22; 73.33%), and holding a degree (n=17; 56.67%), with employment (n=24; 80.00%). The majority of the sample lived with 3-4 family members (n=13; 43.33%) and had 3 or more children (n=13; 43.33%). All patients had received prior oncological therapies, and most were currently undergoing treatment (n=28; 93.33%). The patients we interviewed were awaiting CT scans (n=15; 50.00%), ultrasounds (n=10; 33.33%), and MRIs (n=5; 16.67%) (Table 3).

Table 3. Sociodemographic and clinical data.

	N.	%
Age (mean)	57.4 anni	
Gender		
M	20	66.67
F	10	33.33
Marital status		
Married	22	73.33
Single	4	13.33
Divorced	1	3.33
Widow/widower	1	3.33
Data missing	2	6.67
Education		
Middle school	1	3.33
High school	12	40.00
Degree	17	56.67
Employment		
Employed (including retirees)	24	80.00
Unemployed	1	3.33
Student	1	3.33
Data missing	4	13.33
Previous oncological therapies		
Yes	30	100.00
No	0	0.00
Diagnostic test to be performed		
CT scans	15	50.00
Ultrasound	10	33.33
MRIs	5	16.67

From the qualitative analysis, 4 themes emerged:

# 1. Waiting Affects the Emotional Experience

The interviews revealed that waiting for a diagnostic exam generates emotions and sensations that are experienced differently by each patient. Some patients experience the waiting period negatively, as they perceive the time before the exam as excessively long:

<sup>&</sup>quot;I feel awful because the wait is long... there are many thoughts running through my mind..." (I18)

<sup>&</sup>quot;... I'm still waiting for them to call me for the CT scan" (I22)

<sup>&</sup>quot;... the waiting time is long... the wait has always been devastating" (I18)

"The waiting times... entering and finding out you have to wait another half hour is unbearable. That half hour feels endless." (I2)

Some patients also feel anxious about their ability to prepare for the pelvic ultrasound:

"...since it's an ultrasound where I have to drink, it stresses me a little because I'm not sure if my bladder will be full or if I'll be able to hold it." (I17)

"... the wait creates anxiety... will I be able to do the bladder ultrasound?" (I23)

### Others worry about the results:

"If something negative comes up, of course, it would lead to a spiral of worries." (16)

"If there are significant changes in the report, I would be worried..." (I29)

"... you don't know if there is something wrong or not, and this creates a state of fear, a constant sense of suspense... there's no one to tell you everything is fine." (I24)

The predominant feeling of negative anticipation is mainly due to fear, both of receiving a positive result of the disease:

"The thought that the exam might reveal something..." (I27)

And of the possible recurrence:

"The fear of recurrence..." (I10)

"... So I'll have to remove the tumor, I'll have to go through the whole process again, and so some fear comes in..." (I15)

"... fear of what lies ahead, knowing that these melanomas can cause metastases..." (I19)

### Others experience the wait more positively due to an optimistic personality:

"What helps is that I'm very positive... I try to face things with a certain philosophy, always thinking of the best..." (I7)

"... I always look on the bright side..." (I8)

"And I'm optimistic, I want to stay calm..." (I9)

### And rationality:

"It also depends a bit on the character of the person; I tend to be rational..." (I29)

"... I'm quite calm, rational by nature..." (I15)

In some cases, past experience with long follow-up periods helps patients face the waiting period more calmly:

"The first few years were obviously more complicated... but now, since 2014, I've gotten pretty calm, so I face it with peace of mind." (I6)

"... calm, also because many years have passed... I face the wait with a lot more serenity than before." (128)

"... pretty calm because I've already had several... before, I used to be a bit more anxious..." (I29).

### For others, the presence of professional, competent healthcare staff plays an important role:

- "... the staff I found at IFO is not only competent but much more... they are extremely professional and experienced, which makes you feel calm." (I5)
- "... there is professionalism from everyone..." (I12)
- "... when I dealt with the specialists, I calmed down... a competent person can reassure you because they've seen thousands of cases like mine..." (I19)

# Healthcare staff who are kind:

- "... the way they handle patients with kindness definitely helps... it helps you relax and face the visit differently." (I17)
- "... kindness... being greeted by a caring and kind person is what we need, it makes you feel relieved..." (I27)

"... I also found kindness; they take care of people... I found reliable people, that's it" (I19)

And provide the right information to make the wait more positive:

"... we're followed so well that we're calm, always informed about what's happening and updated on every little detail... information brings peace of mind." (I14)

"I was reassured, they explained what would happen, what the next steps would be, so I know what I've had, what it entails, and what the risks are..." (I22)

Finally, some believe that trust in scientific progress and the staff helps make the wait more positive:

- "... there are treatments; we're in 2024, and fortunately, medicine is progressing, and that helps me overcome fears..." (I18)
- "... I believe in science and doctors... I feel calm when I come here." (I5)
- "... and the positive thing is that research is moving forward; I follow the Facebook page and see that a lot of research is being done, which is reassuring..." (I10)

# 2. The Two Faces of Family Support

Family or friend support plays a dual role. On one hand, patients feel reassured by the presence of people they care about:

"This gives me peace of mind: seeing my children doing well, calm, and then I'm calm too." (I8)

- "... I'm happy like this, with my wife, my daughter, with my family and my daughter's family, two families, they're doing well, and so are we." (I20)
- "... I have the fundamental support of my daughter..." (I26)

"I'm very sociable, I have friends, I never lose heart, that helps me, this awareness helps me in society..." (19).

Without such support, they would feel anxious:

"After my husband's death, living alone, you approach things with more anxiety because you don't have the support of someone by your side, you feel empty..." (I9).

On the other hand, this support creates a sense of discomfort in the patient, related to feeling dependent on family:

- "... I feel worse for my children because I'm a bother to them." (I9)
- "... I couldn't come here alone, and that's a discomfort because I always have to depend on someone, whereas before I was independent in everything..." (I26)

#### 3. Coping Strategies for the Wait

Patients reported using various strategies to cope with the waiting period. Many said they avoided thinking about the diagnostic test until the last moment, focusing instead on daily activities like what groceries to buy or which errands to run after the test:

- "... going shopping, running errands... that reassures me..." (I9)
- "... I try not to think about it until the last moment... I focus on work, home..." (I13)

Others reported using music as a distraction, listening to it through portable headphones to stay calm and avoid overthinking:

"I try to distract myself, with music in my headphones. I mustn't think about it, I have to stay calm; otherwise, if I start thinking, I'll feel worse" (I2)

Another way to manage the wait is by talking to other patients in the waiting room. This exchange allows them to encourage each other, creating an atmosphere of mutual support. The shared experiences and stories from others facing similar situations make them feel better, as they often realize there are people in more difficult conditions than theirs:

"... I talk a lot with others, and it helps me relieve tension... encouraging others, but in encouraging others, I encourage myself, and time passes" (I7)

"... hearing testimonies, the comparison with people who are surely worse off than I am, makes me feel better" (I27)

Moreover, some patients find comfort in prayer and faith. Spirituality plays an important role for many, who see faith as a source of strength and calm. Trusting in God and praying becomes a way to deal with uncertainty and find hope in the process they are going through:

- "... I'm a believer, I believe in the creator... faith is essential... prayer... that gives me a lot of strength..." (I7)
- "... well, if it is Christ's wish, unfortunately, there's nothing else I can do. I trust in faith, prayer, and common sense..." (I15)
- "... I have a lot of trust; I believe in God..." (I24)

### 4. Waiting Requires Attention to the Person and the Environment

The interviews highlighted the need to pay attention to the person undergoing the scheduled diagnostic exam, especially with regards to making them feel welcome. Many patients expressed the desire for dedicated staff in the waiting room to facilitate their reception, such as "volunteer staff trained in welcoming," to make the experience more positive. This mainly concerns the service checkin process and waiting:

- "... those working here should be trained differently because training them and transferring different skills from what they currently have would certainly yield better results." (I11)
- "... the presence of volunteers to help us understand the paths, how to move around... to provide support, give directions, take a number—this would certainly help a lot..." (I22)
- "... someone to let you know if there's still more waiting..." (I24)

Another important aspect that emerged is the need for better information and communication about how to retrieve the results and communicate with radiology service staff, with suggestions for activating remote communication and consultation services:

"... communication when we're at home, and the numbers and references when we're home could definitely be improved, because it's not always possible to return in person to get an answer." (I22)

The need for psychological support was also identified as a helpful element in facing and overcoming the anxiety and fear of the exam:

- "Maybe a psychologist would be useful... I know, in general, it can be a good approach; some people really need it to cope with this anxiety, this fear." (I3)
- "... psychological support... having some comfort would be important." (I28)

The wait also brings attention to the environment; in fact, patients in the interviews mentioned the need for a more comfortable environment:

- "... having a more comfortable environment with less confusion... if there are other people like me who don't know, they start asking questions and get agitated, and that agitation tends to spread to others." (I22)
- "... I'm handling it pretty well, but it would be nicer if there were more space or a screen to show when it's your turn." (I12)
- "If there were more screens, you could sit comfortably in the larger waiting room where the benches are, knowing when it's your turn with less anxiety—because you wouldn't have to get up all the time to check the screen." (I12)

Music, television, or furnishings can also help distract patients during the wait:

- "... background music would not be a bad idea, for those that are a little more anxious, it could be a distraction." (I1)
- "Help them unwind, give them a chance not to think about what they're about to do. For example, do you have TVs? Use them... background music." (I2)

- "... a television, something to distract them so they don't think so much... the television might help reduce anxiety a bit." (I5)
- "Environmental comfort could be achieved by showing something on TV; it is a good distraction, and you stop thinking about what you have to do." (I29)
- "... they could add something to make the environment more welcoming, more like home, soften the colors in the waiting area, making it feel more welcoming and less cold." (I12)

# 4. Discussion

The objective of this study was to explore the experiences lived by patients with CM before undergoing diagnostic examinations. The qualitative analysis of the interviews revealed a complex range of emotions and reactions that patients experience while waiting for a diagnostic exam. Individual, social, and environmental factors influence these experiences, generating emotional responses that can vary from anxiety and fear to optimism and calmness.

The results indicate that waiting for a diagnostic exam is a critical moment, often characterized by anxiety and worry. These emotions can stem from the fear of negative results or the uncertainty about preparing for the exam itself. Literature supports these observations, showing that uncertainty associated with the diagnosis can intensify anxiety in patients [25]. The idea that waiting can amplify the emotional experience is confirmed by studies demonstrating how the anticipation of stressful events can negatively impact psychological well-being [26]. Some patients described positive coping strategies, such as optimism, listening to music, or talking with other patients. These approaches can facilitate a more serene waiting experience. Literature suggests that adaptive coping strategies, such as socialization and optimism, are associated with less anxiety and a better quality of life in cancer patients [27]. Additionally, sharing experiences with other patients can create a sense of community and mutual support, contributing to a more positive perception of waiting [28].

Family support plays a crucial role in the lives of melanoma patients, with both positive and negative effects. On one hand, the support of loved ones provides comfort and reassurance, contributing to the patient's emotional well-being. Many studies demonstrate that social support is fundamental in managing medical stress and illness[29], improving emotional adjustment and quality of life, and reducing the sense of dependence [30,31]. This support helps patients maintain a positive attitude and greater resilience in the face of disease challenges [30,31]. On the other hand, some patients perceive a dependence on family support, generating feelings of guilt and sorrow as they see their autonomy reduced and fear becoming a burden to their loved ones. Literature confirms this: some studies report that patients experiencing chronic illness may feel guilty about the emotional burden their health places on their families [32].

Melanoma patients adopt various strategies to cope with the waiting period before a diagnostic exam, trying to manage anxiety and stress. Some patients prefer not to think about the exam until the last moment, focusing on daily activities such as grocery shopping or running errands to keep their minds occupied. Literature suggests that distraction can be an effective strategy for managing stress and anxiety [33]. Other patients use music as a means of distraction, listening to it through portable headphones to stay calm and avoid negative thoughts. Recent studies have shown that music can have beneficial effects on patients' emotional and psychological states, reducing anxiety and improving mood [34]. Another common strategy is interacting with other patients in the waiting room. This exchange allows them to encourage each other and create a supportive environment. Sharing testimonials and experiences with those facing similar situations helps them feel better, often realizing that others may be in a more difficult condition than them. Literature highlights that social support and interaction with others in similar situations can improve emotional adjustment and reduce feelings of isolation [33]. Finally, some patients find comfort in prayer and faith. Spirituality plays an important role for many, offering a source of strength and tranquility. Trusting in God and praying becomes a way to cope with uncertainty and find hope in the process they are experiencing. Literature suggests that spirituality and religion may be correlated with a better quality of life [35].

Paying attention to the person undergoing the diagnostic exam is fundamental. Ensuring a warm and professional welcome can make patients feel respected and understood, improving their overall experience. Requests for a more welcoming environment and better communication with healthcare staff have been strongly emphasized. Patients highlighted the need to improve communication and information regarding result retrieval and consultation with radiology staff. The ability to access remote communication and consultation services has been indicated as crucial in reducing anxiety and improving patient satisfaction. The literature suggests that a comfortable hospital environment and clear communication can reduce anxiety and improve the patient experience [36]. The implementation of improved welcome practices and clear information on healthcare processes has been associated with greater patient satisfaction [37]. Additionally, many patients emphasized the importance of psychological support to address anxiety and fear related to the diagnostic exam. Access to a psychologist could provide fundamental emotional support, helping patients better manage stress and anxiety. The literature highlights that psychological support can be crucial in improving the emotional well-being of cancer patients [38,39]. The waiting room environment is another factor that influences the patient experience. A more comfortable environment, with less confusion, more space, and informative screens, can help reduce anxiety. Patients suggested the presence of screens indicating when it is their turn, background music, TVs, and more welcoming decor to create a less cold and more relaxing environment. Literature suggests that a comfortable and welcoming environment can improve patient experience and reduce stress [40]. Finally, music, TV, and decor can help distract patients during the wait, reducing anxiety and improving their emotional state. Studies have shown that distraction elements like music and television can have positive effects on patient well-being [41]. In summary, these interventions can help create a more serene and reassuring environment, helping patients in better managing the waiting period and improving their overall experience.

#### 5. Conclusions

Waiting for a diagnostic exam is a critical moment for patients, influenced by complex emotions and interconnected factors. Individual experiences vary widely and are shaped by personal, social, and environmental factors. Healthcare professionals need to recognize and address these dynamics to improve care and support for patients. Training healthcare staff, psychological interventions, and technological innovation are all aspects that can help improve the waiting experience. Investing in these areas would not only foster a more welcoming and reassuring environment for patients but also enhance their psychological well-being and overall satisfaction with care pathways. The results of this study confirm the importance of a multidimensional approach in healthcare, highlighting how the quality of waiting can significantly influence the patient care pathway.

The study presents several limitations, including monocentricity, which compromises the ability to generalize based on the results, given that it was conducted in a single location, Rome. This may influence patients' experiences due to cultural and contextual factors. Additionally, the qualitative nature of the data can introduce subjectivity and difficulties in replicating the results, while researcher bias may further compromise interpretation. For the future, it is recommended to conduct multicentric studies to obtain a larger sample, to adopt mixed methodologies for a more comprehensive view of patients' experiences, and to integrate family support into intervention programs. It is essential to develop practical resources for managing anxiety and to train health professionals in recognizing and managing patients' emotions. Finally, future research should continue to explore the emotional and relational dimensions of waiting, promoting a patient-centric approach in clinical practice.

**Author Contributions:** Contributions to the study design: LI, FG, MC; contributions to data collection and analysis: SM, FD, FP, AG; drafting the paper: LI, FG, SM; contributions to data interpretations and drafting the paper: LI, FG, MC; contributions to manuscript revision: FE, LI, FG. Final approval of the published version and full data access: LI, FG, SM, FD, FE, FP, AG, MC. All authors read and approved the manuscript.

**Funding:** This work was financially supported through funding from the institutional "Ricerca Corrente" granted by the Italian Ministry of Health. The funders had no role in considering the study design or in the collection, analysis, interpretation of data, writing of the report, or decision to submit the article for publication.

**Institutional Review Board Statement:** The study was conducted in accordance with the Declaration of Helsinki, and approved by the Lazio District 5 Territorial Ethics Committee – Trial Register Experiments No. 40/ISG/23 of 20 September 2023. Written consent was obtained from all study participants.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study. Written informed consent has been obtained from the patient(s) to publish this paper.

**Conflicts of Interest:** The authors declare no conflicts of interest.

# References

- 1. AIOM, L.G. Melanoma. edizione 2021. 2023.
- 2. Garbe, C.; Keim, U.; Eigentler, T.; Amaral, T.; Katalinic, A.; Holleczek, B.; Martus, P.; Leiter, U. Time trends in incidence and mortality of cutaneous melanoma in Germany. *Journal of the European Academy of Dermatology and Venereology* **2019**, 33, 1272-1280.
- 3. Welch, H.G.; Mazer, B.L.; Adamson, A.S. The rapid rise in cutaneous melanoma diagnoses. *The New England journal of medicine* **2021**, 384, 72-79.
- 4. Dummer, R.; Pittelkow, M.R.; Iwatsuki, K.; Green, A.; Elwan, N.M. Skin cancer-A world-wide perspective; Springer: 2011.
- 5. Garbe, C.; Schadendorf, D. Surveillance and follow-up examinations in cutaneous melanoma. *Oncology Research and Treatment* **2003**, *26*, 241-246.
- 6. Ricci, F.; Caggiati, A.; Ziparo, V.; Elia, M.; Russo, G.; D'Atri, S.; Failla, C.M.; Panebianco, A.; Annessi, G.; Passarelli, F. Il percorso diagnostico terapeutico e assistenziale nella gestione del paziente con melanoma cutaneo: l'esperienza dell'IDI di Roma. **2019**.
- 7. Catalano, O.; Roldán, F.A.; Varelli, C.; Bard, R.; Corvino, A.; Wortsman, X. Skin cancer: findings and role of high-resolution ultrasound. *Journal of ultrasound* **2019**, 22, 423-431.
- 8. Corvino, A.; Catalano, F.; Cipolletta Campanile, A.; Cocco, G.; Delli Pizzi, A.; Corvino, F.; Varelli, C.; Catalano, O. Interventional ultrasound in dermatology: a pictorial overview focusing on cutaneous melanoma patients. *Journal of Ultrasound in Medicine* **2022**, *41*, 3137-3144.
- 9. Chernyshov, P.V.; Lallas, A.; Tomas-Aragones, L.; Arenbergerova, M.; Samimi, M.; Manolache, L.; Svensson, A.; Marron, S.; Sampogna, F.; Spillekom-vanKoulil, S. Quality of life measurement in skin cancer patients: literature review and position paper of the European Academy of Dermatology and Venereology Task Forces on Quality of Life and Patient Oriented Outcomes, Melanoma and Non-Melanoma Skin Cancer. *Journal of the European Academy of Dermatology and Venereology* 2019, 33, 816-827.
- 10. Malkhasyan, K.A.; Zakharia, Y.; Milhem, M. Quality-of-life outcomes in patients with advanced melanoma: a review of the literature. *Pigment cell & melanoma research* **2017**, *30*, 511-520.
- 11. Cornish, D.; Holterhues, C.; Van de Poll-Franse, L.; Coebergh, J.W.; Nijsten, T. A systematic review of health-related quality of life in cutaneous melanoma. *Annals of Oncology* **2009**, *20*, vi51-vi58.
- 12. Bui, K.T.; Liang, R.; Kiely, B.E.; Brown, C.; Dhillon, H.M.; Blinman, P. Scanxiety: a scoping review about scan-associated anxiety. *BMJ open* **2021**, *11*, e043215.
- 13. Busca, E.; Savatteri, A.; Calafato, T.L.; Mazzoleni, B.; Barisone, M.; Dal Molin, A. Barriers and facilitators to the implementation of nurse's role in primary care settings: an integrative review. *BMC nursing* **2021**, *20*, 1-12.
- 14. Välimäki, M.; Hu, S.; Lantta, T.; Hipp, K.; Varpula, J.; Chen, J.; Liu, G.; Tang, Y.; Chen, W.; Li, X. The impact of evidence-based nursing leadership in healthcare settings: a mixed methods systematic review. *BMC nursing* **2024**, 23, 452.
- 15. Tong, A.; Sainsbury, P.; Craig, J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International journal for quality in health care* **2007**, *19*, 349-357.

- 16. Booth, A.; Hannes, K.; Harden, A.; Noyes, J.; Harris, J.; Tong, A. COREQ (consolidated criteria for reporting qualitative studies). *Guidelines for reporting health research: a user's manual* **2014**, 214-226.
- 17. Dossett, L.A.; Kaji, A.H.; Cochran, A. SRQR and COREQ reporting guidelines for qualitative studies. *JAMA surgery* **2021**, *156*, 875-876.
- 18. Takona, J.P. Research design: qualitative, quantitative, and mixed methods approaches. *Quality & Quantity* **2024**, *58*, 1011-1013.
- 19. Trundle, C.; Gardner, J.; Phillips, T. The Ethnographic Interview: An Interdisciplinary Guide for Developing an Ethnographic Disposition in Health Research. *Qualitative Health Research* **2024**, 10497323241241225.
- 20. Guest, G.; Namey, E.; Chen, M. A simple method to assess and report thematic saturation in qualitative research. *PloS one* **2020**, *15*, e0232076.
- 21. Miles, M.B.; Huberman, A.M.; Saldaña, J. Qualitative data analysis: A methods sourcebook. 3rd. 2014.
- 22. Klingberg, S.; Stalmeijer, R.E.; Varpio, L. Using framework analysis methods for qualitative research: AMEE Guide No. 164. *Medical Teacher* **2024**, *46*, 603-610.
- 23. Ys, L. Guba EG. Naturalistic inquiry. Beverly Hills. Sag 1985.
- 24. Enworo, O.C. Application of Guba and Lincoln's parallel criteria to assess trustworthiness of qualitative research on indigenous social protection systems. *Qualitative research journal* **2023**, *23*, 372-384.
- 25. Casales Morici, B.; Augustsson, H.; Hasson, H.; Ebbevi, D. Information and support to patients when the waiting time guarantee cannot be fulfilled: a qualitative study. *International Journal for Equity in Health* **2023**, 22, 130.
- 26. Li, J.; Li, C.; Puts, M.; Wu, Y.-c.; Lyu, M.-m.; Yuan, B.; Zhang, J.-p. Effectiveness of mindfulness-based interventions on anxiety, depression, and fatigue in people with lung cancer: a systematic review and meta-analysis. *International journal of nursing studies* **2023**, *140*, 104447.
- 27. Troy, A.S.; Willroth, E.C.; Shallcross, A.J.; Giuliani, N.R.; Gross, J.J.; Mauss, I.B. Psychological resilience: an affect-regulation framework. *Annual review of psychology* **2023**, *74*, 547-576.
- 28. Ruiz-Rodríguez, I.; Hombrados-Mendieta, I.; Melguizo-Garín, A.; Martos-Méndez, M.J. The importance of social support, optimism and resilience on the quality of life of cancer patients. *Frontiers in psychology* **2022**, 13, 833176.
- 29. Voskanyan, V.; Marzorati, C.; Sala, D.; Grasso, R.; Pietrobon, R.; van der Heijden, I.; Engelaar, M.; Bos, N.; Caraceni, A.; Couspel, N. Psychosocial factors associated with quality of life in cancer survivors: umbrella review. *Journal of Cancer Research and Clinical Oncology* **2024**, *150*, 1-15.
- 30. Amin, S.M.; Khedr, M.A.; Tawfik, A.F.; Gamal Noaman Malek, M.; El-Ashry, A.M. The mediating and moderating role of social support on the relationship between psychological well-being and burdensomeness among elderly with chronic illness: community nursing perspective. *BMC Nursing* **2025**, 24, 1-15
- 31. Murphy, E.R.; Wippold, G.M.; Crichlow, Z.R. Socioeconomic Status, Social Support, and Quality of Life Among Black Adults. *Journal of Racial and Ethnic Health Disparities* **2024**, 1-10.
- 32. Cohen, S.; McKay, G. Social support, stress and the buffering hypothesis: A theoretical analysis. In *Handbook of psychology and health, Volume IV*; Routledge: 2020; pp. 253-267.
- 33. Zell, E.; Stockus, C.A. Social support and psychological adjustment: A quantitative synthesis of 60 meta-analyses. *American Psychologist* **2024**.
- 34. Feng, Y.; Wang, M. Effect of music therapy on emotional resilience, well-being, and employability: a quantitative investigation of mediation and moderation. *BMC psychology* **2025**, *13*, 47.
- 35. Nagy, D.S.; Isaic, A.; Motofelea, A.C.; Popovici, D.I.; Diaconescu, R.G.; Negru, S.M. The Role of Spirituality and Religion in Improving Quality of Life and Coping Mechanisms in Cancer Patients. In Proceedings of the Healthcare, 2024; p. 2349.
- 36. Kwame, A.; Petrucka, P.M. A literature-based study of patient-centered care and communication in nurse-patient interactions: barriers, facilitators, and the way forward. *BMC nursing* **2021**, *20*, 158.
- 37. Burgener, A.M. Enhancing communication to improve patient safety and to increase patient satisfaction. *The health care manager* **2020**, 39, 128-132.

- 38. Dhakal, K.; Chen, C.; Wang, P.; Mboineki, J.F.; Adhikari, B. Existing psychological supportive care interventions for cervical cancer patients: a systematic review and meta-analysis. *BMC Public Health* **2024**, 24, 1419.
- 39. Lyu, X.-C.; Jiang, H.-J.; Lee, L.-H.; Yang, C.-I.; Sun, X.-Y. Oncology nurses' experiences of providing emotional support for cancer patients: a qualitative study. *BMC nursing* **2024**, *23*, 58.
- 40. Tian, Y. A review on factors related to patient comfort experience in hospitals. *Journal of Health, Population and Nutrition* **2023**, 42, 125.
- 41. King, S.; Woodley, J.; Walsh, N. A systematic review of non-pharmacologic interventions to reduce anxiety in adults in advance of diagnostic imaging procedures. *Radiography* **2021**, *27*, 688-697.

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.