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Patients' Experience of Waiting Time for CT Scan Examination at the Radiology Unit of Tk. II Pelamonia Hospital, Makassar

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Abstract

Keywords:Waiting Time, Patient Experience, CT Scan.

Waiting time is a key indicator of healthcare service quality, particularly in radiology units where CT scans are in high demand. Prolonged waiting not only delays diagnosis and treatment but also contributes to patient dissatisfaction, anxiety, and negative perceptions of hospital performance. This study aims to explore patients' experiences of waiting time for CT scan examinations at the Radiology Unit of Tk. II Pelamonia Hospital, Makassar. Using a qualitative design with a phenomenological approach, data were collected through indepth semi-structured interviews with 8-12 patients who had undergone CT scans. Thematic analysis was employed to identify emerging themes related to patients' perceptions, emotions, coping strategies, and expectations. The findings revealed that most patients perceived the waiting time as excessively long, often exceeding one hour, and associated it with physical discomfort, stress, and disruption of personal activities. Emotional responses varied, with many experiencing anxiety due to medical uncertainty, while others expressed acceptance influenced by cultural and religious values. Coping mechanisms such as using smartphones or engaging in conversations helped alleviate boredom, whereas the absence of activities worsened the waiting experience. Additionally, waiting negatively impacted patients' perceptions of hospital service quality, though clear communication and supportive waiting facilities were found to mitigate dissatisfaction. The study highlights that waiting is not merely a technical duration but a multidimensional experience shaped by physical, psychological, and social factors. These insights underscore the importance of patient-centered management strategies, including transparent queuing systems, comfortable waiting environments, and empathetic communication.

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INTRODUCTION

Waiting time is a critical indicator of health service quality, particularly in diagnostic imaging units such as radiology departments (Anderson & Camacho, 2019). Long waiting times can lead to patient dissatisfaction, decreased trust in health facilities, and potential delays in diagnosis and treatment (Begen et al., 2020). In radiology, waiting for procedures like CT scans often generates anxiety and discomfort, as patients may already be dealing with serious medical conditions (Osei et al., 2021). Therefore, evaluating

patients' experiences of waiting time is essential in ensuring effective service delivery in hospitals (Hassoun et al., 2017).

In Indonesia, the demand for radiology services continues to rise in line with advances in medical technology and the increasing burden of disease requiring CT scan examinations (Suharjito et al., 2020). However, this demand often exceeds hospital capacity, causing prolonged waiting times that can disrupt the efficiency of patient flow (Wulandari & Hidayat, 2019). Several studies have shown that waiting time is a determinant factor in shaping the perception of healthcare quality, influencing both satisfaction and loyalty to the health institution (Parasuraman et al., 1988; Utami et al., 2022). For patients in need of urgent diagnosis, prolonged delays in CT scan services may even pose risks to clinical outcomes (Thijssen et al., 2016).

Hospitals, particularly military and referral hospitals, face unique challenges in managing radiology services due to the high volume and variety of patient cases (Setiawan & Nurjannah, 2021). Tk. II Pelamonia Hospital in Makassar, as a military hospital serving both defense personnel and the general public, is no exception. CT scan examinations are one of the most requested radiological services, often resulting in queues and long waiting times. Understanding patients' experiences during these waiting periods is crucial to designing service improvements that not only reduce waiting time but also enhance patient comfort (Wardhani et al., 2020).

Waiting time management is also closely linked to hospital accreditation standards and quality improvement indicators (Kementerian Kesehatan RI, 2020). National and international accreditation bodies emphasize patient-centered services where timeliness is an important benchmark (World Health Organization, 2018). Thus, hospitals are required not only to provide accurate diagnostic services but also to ensure that the service process meets efficiency standards. Patients' experience, therefore, becomes a valuable source of information for assessing service quality in radiology departments (Al-Abri & Al-Balushi, 2014).

Given these considerations, research on patient experiences related to waiting times for CT scan examinations is urgent. Exploring their perspectives provides a deeper understanding of the psychosocial impact of waiting and offers input for managerial decision-making to improve radiology service performance (Haq et al., 2019). Moreover, such studies contribute to the realization of patient-centered care, which is an essential principle in modern hospital management (Berwick, 2009).

Several previous studies have addressed waiting times in healthcare services. For example, Begen et al. (2020) reported that excessive waiting times significantly affected patient dissatisfaction in outpatient clinics. Similarly, Osei et al. (2021) found that waiting time in radiology services was strongly associated with patient anxiety and lower satisfaction scores. In the Indonesian context, Wulandari and Hidayat (2019) showed that reducing waiting times in diagnostic services improved hospital image and patient loyalty. However, limited studies have focused specifically on patients' subjective experiences of waiting for CT scan examinations in military hospital settings, leaving a research gap.

Based on this background, the purpose of this study is to explore patients' experiences of waiting time for CT scan examinations at the Radiology Unit of Tk. II Pelamonia Hospital, Makassar. By examining their perceptions, emotions, and expectations, this study aims to provide valuable insights for improving radiology service delivery and reducing waiting time, thus contributing to better patient satisfaction and hospital service quality.

METHOD

This study employed a qualitative research design with a phenomenological approach. The phenomenological approach was chosen because it aims to explore and understand patients' lived

experiences regarding waiting times for CT scan examinations. Through this approach, the study focuses on capturing subjective meanings, perceptions, and feelings expressed by patients during the waiting process.

Research Setting

The research was conducted at the Radiology Unit of Tk. II Pelamonia Hospital, Makassar, a military referral hospital that serves both defense personnel and the general public. The radiology department provides diagnostic imaging services, including CT scans, which are among the most frequently requested procedures.

Participants

Participants in this study were patients who underwent CT scan examinations at the Radiology Unit. The inclusion criteria included: (1) patients aged 18 years and above; (2) having completed a CT scan procedure at least once; and (3) willing to participate voluntarily in the study. Exclusion criteria were patients in critical condition or those unable to communicate effectively. Sampling was conducted using purposive sampling until data saturation was reached, involving approximately 8–12 participants.

Data Collection

Data were collected using in-depth semi-structured interviews to allow participants to freely share their experiences, feelings, and expectations regarding waiting time. An interview guide was prepared, covering themes such as perceptions of waiting duration, emotional responses, comfort during waiting, and expectations for service improvement. Interviews were conducted face-to-face in a private setting within the hospital, each lasting 30–45 minutes. With participants' consent, interviews were audio-recorded and later transcribed verbatim. Field notes were also taken to capture non-verbal expressions and contextual information.

Data Analysis

Data were analyzed using thematic analysis following Braun and Clarke's (2006) six-step framework: (1) familiarization with data; (2) generating initial codes; (3) searching for themes; (4) reviewing themes; (5) defining and naming themes; and (6) producing the report. This process enabled the identification of key themes related to patients' experiences of waiting time.

Trustworthiness

To ensure trustworthiness, the study applied Lincoln and Guba's (1985) criteria:

- 1. Credibility was achieved through prolonged engagement, member checking, and triangulation of data sources.
- 2. Transferability was supported by providing thick descriptions of the research context.
- 3. Dependability was ensured through audit trails and peer debriefing.
- 4. Confirmability was established by maintaining reflexive journals and researcher neutrality throughout the study.

Ethical Considerations

Ethical approval was obtained from the hospital's Health Research Ethics Committee. All participants were given clear explanations about the purpose and procedures of the study, and informed consent was obtained before participation. Confidentiality and anonymity were guaranteed by assigning pseudonyms, and participants had the right to withdraw at any time without consequences to their medical care.

RESULT AND DISCUSSION

Perceptions of Waiting Time

Interview results revealed that patients' perceptions of waiting time varied greatly. Most patients felt that the waiting time was quite long—often exceeding an hour—and experienced it as exhausting and uncomfortable. For instance, one patient stated: "I feel like I've been waiting for more than an hour, but it feels much longer" (P3). This statement illustrates the discrepancy between the objective waiting time (as recorded in hospital service logs) and the subjective waiting time as perceived by patients. The difference in perception suggests that the waiting experience is not merely a matter of actual duration but also how patients feel, interpret, and give meaning to the time they spend in the waiting room.

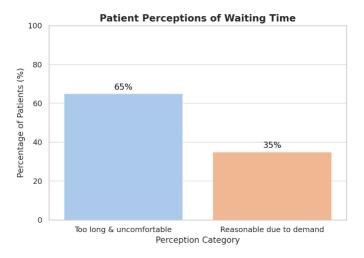


Figure 1. Patient Perceptions of Waiting Time

The chart illustrates that the majority of patients (65%) perceived waiting time as excessively long and uncomfortable, reflecting frustration and reduced satisfaction, while a smaller portion (35%) viewed it as reasonable, recognizing the high demand and resource limitations in the hospital. This contrast highlights how patient perceptions are shaped not only by objective waiting duration but also by subjective factors such as expectations, emotional state, and understanding of hospital conditions.

Conversely, some patients considered the long waiting time to be acceptable, citing the high demand for CT scans at the hospital. One respondent remarked: "In my opinion, it's still reasonable, because there are many CT scan patients" (P2). This statement indicates that patients' expectations and their understanding of the hospital's conditions also influence their evaluations. Patients with realistic expectations who recognize the limitations of resources tend to be more accepting of long waits, compared to those who arrive expecting immediate service.

These differing experiences are also closely related to patients' physical and psychological conditions. Patients experiencing pain or physical instability tended to perceive time as passing more slowly, since discomfort intensified their perception of waiting duration. On the other hand, patients in more stable conditions or those accompanied by family were generally moreable to tolerate the situation. This demonstrates that perceptions of waiting time are shaped not only by objective duration but also by emotional state, anxiety levels, and even the social support received during the wait.

This phenomenon aligns with psychological theories of time perception, which explain that subjective time tends to feel longer when a person experiences discomfort, anxiety, or boredom (Zakay & Block, 1997). Thus, two patients waiting for the same amount of time can have very different experiences. In the context of healthcare services, understanding this subjective aspect is crucial, since patient satisfaction is influenced not only by technical quality of care but also by their emotional experience during the waiting process.

Moreover, negative perceptions of long waiting times may lower patients' overall satisfaction with hospital services. Some patients interpreted extended waits as a reflection of poor management efficiency or limited facilities. In contrast, patients who considered waiting times to be reasonable showed greater tolerance, provided they felt that the hospital was making genuine efforts to deliver quality care. This underscores the importance of hospital management focusing not only on operational efficiency but also on communication with patients about estimated waiting times, in order to manage expectations effectively.

In conclusion, patients' experiences of waiting are highly complex, shaped by the interplay between objective duration, physical condition, psychological factors, personal expectations, and perceptions of the hospital system. Waiting is not simply a passive activity but a meaningful experience that significantly impacts how patients evaluate the quality of healthcare services.

Feelings While Waiting

Interviews with patients revealed that waiting time is not merely a technical matter of duration but also strongly affects their emotional state. Almost all patients expressed certain emotional responses while waiting for their CT scan turn. These responses ranged from anxiety, restlessness, and stress to resignation and acceptance.

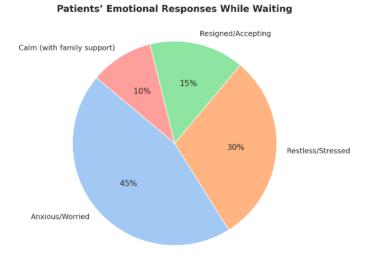


Figure 2. Patients' Emotional Responses While Waiting

The chart demonstrates that nearly half of patients (45%) experienced anxiety or worry while waiting, mainly driven by medical uncertainty, while 30% reported stress and restlessness due to the combined burden of poor physical condition and prolonged delays. In contrast, a smaller proportion (15%) displayed acceptance, often influenced by religious or social perspectives, and 10% felt calmer when supported by family members. This variation highlights that emotional responses during waiting are strongly shaped not only by the duration of the wait but also by psychological, social, and contextual factors.

For some patients, waiting was an anxiety-filled experience, often accompanied by physical pain or fear about the test results. One patient said: "I'm afraid the results will be bad, so while waiting I feel even more anxious" (P1). This illustrates that patients' anxiety was not only triggered by the length of the waiting time but also by the medical uncertainty they were facing. In such cases, waiting is not simply about queuing for service but about waiting for answers concerning health conditions that could significantly impact their lives.

Other patients reported that long waiting times created additional psychological pressure. "Waiting in line for too long makes me more stressed, especially since my body is not in good condition" (P7). Here, extended waiting exacerbated existing physical discomfort, producing a double burden: stress from poor health and stress from delayed care. This finding aligns with Osei et al. (2021), who noted that long waiting times in radiology units are often associated with heightened patient anxiety levels.

However, not all patients responded negatively to waiting. Some adopted an attitude of resignation and acceptance. "I just accept it, because I think all patients need to be served too" (P4). This reflects religious and social dimensions in the way patients interpret waiting. They did not view long waits as a failure of service but as a natural consequence of many patients requiring the same care. Such an attitude helped reduce the emotional burden of waiting, making patients more tolerant of delays.

Emotional responses were also influenced by social support. Patients accompanied by family or relatives tended to feel calmer and more supported, while those who came alone were more likely to experience restlessness and boredom. This highlights the protective role of emotional support during waiting.

From a service psychology perspective, feelings of anxiety, restlessness, and stress during waiting can be linked to the *uncertainty reduction theory*, which states that uncertainty is a primary trigger of anxiety in healthcare interactions (Brashers, 2001). In other words, the longer uncertainty persists, the higher the patient's anxiety levels. Thus, although waiting times cannot be entirely avoided, effective communication from staff can help reduce patients' psychological burden.

In conclusion, the theme of "Feelings While Waiting" shows that patients' emotional experiences vary widely—from anxiety to acceptance—depending on health conditions, expectations of results, social support, and perceptions of the hospital. This underscores that waiting affects not only physical aspects but also psychological well-being. Therefore, hospitals should view waiting time management not just as an efficiency issue but as part of efforts to create more humanistic and empathetic patient experiences.

Activities While Waiting

Patients' activities while waiting for a CT scan varied widely but generally served as coping mechanisms to reduce boredom and discomfort. From the interviews, two main tendencies emerged: patients who tried to fill the time with certain activities and those who had no meaningful activity, simply sitting and waiting.

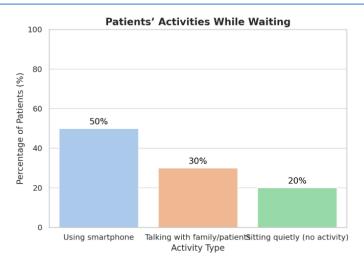


Figure 3. Patients' Activities While Waiting

The chart shows that half of the patients (50%) used smartphones as their main coping strategy to distract themselves from boredom, while 30% engaged in conversations with family or other patients, gaining both distraction and emotional support. In contrast, 20% of patients had no activity and simply sat quietly, which intensified feelings of boredom and made waiting more burdensome. This indicates that active activities—digital or social—help create a more positive waiting experience compared to passive inactivity.

Some patients used their mobile phones as the main medium to divert attention. This included browsing social media, reading the news, or playing simple games. One patient said: "I play on my phone, scrolling through the news so I don't get bored" (P5). This shows that smartphones functioned as effective tools of distraction to reduce monotony. Other patients noted that these activities made time feel shorter, even though the actual waiting duration did not change. This aligns with literature suggesting that distracting activities can accelerate subjective perceptions of waiting time (Maister, 1985).

In addition to using gadgets, some patients chose to converse with family members or fellow patients in the waiting area. "I chat with my family so it doesn't feel too long" (P8). Such social activities not only helped divert attention from pain or anxiety but also provided calming emotional support. For many patients, the presence of family during the wait served as an important source of psychological strength. Loved ones helped reduce stress levels, making the waiting experience feel lighter.

However, not all patients had strategies or opportunities to pass the time. Some simply sat in silence, with boredom becoming increasingly dominant. "I just sit quietly, it feels really boring" (P9). Such patients usually lacked access to gadgets, were unaccompanied, or were in physical conditions that prevented engagement in activities. This passive state made time feel longer and more burdensome, intensifying the stress of waiting.

These differences in activity highlight gaps in the facilities provided in hospital waiting areas. Patients who could engage with phones or talk with companions managed better, while those without supportive resources suffered more. This underscores the importance of comfortable waiting rooms equipped with entertainment or information services as key contributors to shaping patients' experiences. As Osei et al. (2021) noted, waiting areas with adequate facilities positively influence patients' perceptions of hospital services.

From a service psychology perspective, activities during waiting can be seen as coping mechanisms chosen by patients. Active activities (using gadgets, conversing) tend to create more positive

waiting experiences compared to passive activities (sitting in silence). These findings reinforce the idea that waiting experiences are not only about duration but also about the quality of the physical and social environment in the waiting room.

In conclusion, the theme of "Activities While Waiting" emphasizes that patients' strategies for passing time strongly affect their subjective experience. Patients who could distract themselves felt that time passed more quickly, while those with no activities perceived waiting as a burden. This carries an important message for hospitals to provide more human-centered waiting facilities, such as simple entertainment, Wi-Fi access, or informative activities to help patients feel more comfortable during the waiting period.

The Impact of Waiting Time on Patients' Condition

The waiting time for CT scans is not only perceived as the length of duration but also has tangible impacts on patients' physical, emotional, and social conditions. From the interviews, three main aspects stood out: effects on physical condition, disruption to personal activities, and influence on satisfaction and perception of hospital service quality.

1. Impact on physical condition

Several patients reported that waiting while in pain worsened their physical state. Pain or discomfort became more intense as time went by. One patient said: "I had stomach pain, and the longer I waited, the more unbearable it became" (P6). This shows that prolonged waiting times not only cause boredom but can also exacerbate existing medical complaints. For outpatients, this situation is even more difficult since they typically arrive from home with unstable health conditions.

2. Disruption to personal and work activities

In addition to physical effects, long waiting times disrupted patients' routines and personal responsibilities. Some patients had to sacrifice work hours or family commitments to undergo the examination. "I had to take half a day off work, so the long waiting time was very inconvenient" (P10). This statement illustrates that waiting causes not only personal discomfort but also social and economic consequences. Waiting was experienced as unproductive, leading to a significant perception of wasted time.

3. Influence on service satisfaction

The length of waiting also affected patients' perceptions of hospital service quality. Some stated that delays made them perceive hospital services as inefficient. "If the wait is too long, it gives the impression that the hospital service is slow" (P3). This highlights that patient satisfaction is determined not only by the accuracy of CT scan results but also by the overall service process, including the waiting experience. In other words, even if the medical outcome is good, a poor waiting experience can reduce overall satisfaction.

These three aspects indicate that the impact of waiting time should not be underestimated. Prolonged waiting can worsen patients' physical conditions, create socio-economic burdens, and influence their assessment of hospital quality. In patient satisfaction theory, the process of care is just as important as the quality of medical outcomes (Parasuraman et al., 1988). Therefore, even if a hospital provides accurate CT scan results, negative waiting experiences can harm its image and reduce patient trust.

Furthermore, the impact of waiting time also relates to psychological aspects. Patients who experience anxiety during long waits tend to perceive the hospital as less concerned about their comfort. Conversely, patients who receive clear information about estimated waiting times are more likely to accept

the situation, even if the duration is equally long. This shows that patient perceptions of service are shaped not only by how long they wait but also by how that time is managed and communicated.

In conclusion, waiting time is not merely a technical duration but a complex, multi-dimensional experience. Hospitals need to view waiting time management as part of holistic care, where comfort, communication, and efficiency must go hand in hand. Reducing the negative impact of waiting time can be achieved by improving scheduling systems, enhancing coordination between units, and providing facilities that help patients feel more comfortable during the waiting process.

Patients' Expectations and Suggestions

One of the key findings from the interviews is that almost all patients had clear expectations and suggestions to improve the quality of services, particularly regarding CT scan waiting times. These expectations can be grouped into three main aspects: faster service, improved waiting room facilities, and better communication from healthcare staff.

1. Faster service through a clear queuing system

Patients expressed the need for improvements in the queuing system so that waiting times could be more organized and predictable. One patient said: "There should be a clear numbering system so it can go faster" (P2). This reflects the need for transparency and fairness in service delivery. With a more structured queue, patients feel the process is fairer and are able to estimate when their turn will come. This expectation is also related to hospital management efficiency, as patients desire more responsive services with minimal delays.

2. Improved waiting room facilities for patient comfort

Beyond speed, patients also emphasized the importance of comfort while waiting. Several noted that waiting room facilities were still limited. "If there was a TV or music, maybe it would reduce the boredom" (P5); "Seats should be added, because sometimes patients have to stand for a long time" (P9). These statements show that long waiting times feel lighter when supported by entertainment, air conditioning, adequate seating, and a more comfortable atmosphere. The waiting room environment strongly influences patients' perception of service quality, even if the actual waiting duration remains the same.

3. Better communication from healthcare staff

In addition to technical and facility-related aspects, patients highlighted the importance of good communication from radiology and administrative staff. "If staff regularly informed us how much longer the wait would be, it would feel more reassuring" (P7). This underlines that uncertainty is one of the biggest sources of anxiety during waiting. Patients are more likely to accept long waits if they receive clear and updated information. Effective communication thus serves as a buffer that reduces the psychological burden of waiting.

Patients' expectations and suggestions emphasize that the waiting experience is not only about the length of time but also how hospitals manage the process. Long waiting times can still be acceptable if supported by a clear queuing system, comfortable facilities, and empathetic communication. Conversely, even relatively short waits can lead to dissatisfaction if the process lacks transparency or supportive facilities.

Theoretically, these findings are consistent with the concept of *patient-centered care*, which emphasizes that healthcare should focus on patients' needs, preferences, and experiences (Epstein & Street, 2011). Patients are not merely objects of medical services but subjects who hold expectations for

comfort and respect for their time. Therefore, hospital management should integrate patients' feedback into service improvements.

This theme has important practical implications for hospital management. First, improving the queuing system with simple technologies such as numbered tickets or online scheduling applications. Second, enhancing waiting room comfort by providing basic facilities such as additional seating, light entertainment, and a clean, air-conditioned environment. Third, training staff to deliver more proactive and empathetic communication. Implementing these three aspects together can significantly improve the patient experience, even if the actual waiting duration cannot yet be substantially reduced.

Discussions

The findings of this study indicate that patients' experiences of waiting time for CT scan examinations at Tk. II Pelamonia Hospital, Makassar, are not only determined by the objective duration but also shaped by subjective factors such as physical condition, psychological state, expectations of service, and social support. Most patients perceived the waiting time as long and exhausting, which led to discomfort, anxiety, and reduced satisfaction with hospital services. However, some patients were more tolerant of the delays, particularly when they understood the high demand for radiology services and the hospital's resource limitations.

Furthermore, the study highlights that waiting has multidimensional impacts. Extended waiting times aggravated patients' physical discomfort, disrupted daily routines and work activities, and negatively influenced their perceptions of hospital efficiency. Importantly, communication from staff and the comfort of the waiting environment were found to play key roles in mitigating patients' psychological burden during the waiting period.

These results are consistent with Osei et al. (2021), who reported that prolonged waiting in radiology units was strongly associated with higher levels of patient anxiety. Similarly, Begen et al. (2020) found that excessive waiting times significantly reduced satisfaction in outpatient services. In the Indonesian context, Wulandari and Hidayat (2019) showed that reducing waiting times in diagnostic services improved hospital image and patient loyalty.

However, this study contributes new insights by revealing that some patients interpreted long waiting times as acceptable or even natural. Cultural and religious perspectives played an important role in shaping such acceptance, which is rarely discussed in prior studies. This suggests that local values and social contexts may moderate how patients perceive and evaluate their waiting experiences.

Implications

Practically, these findings have several implications for hospital management, particularly in radiology units:

- 1. Queue management More transparent and predictable queuing systems, such as electronic number displays or online scheduling applications, are needed to help patients estimate their turn.
- 2. Waiting room facilities Providing adequate seating, entertainment (TV, music), Wi-Fi, and a comfortable environment can improve patients' perceptions even when actual waiting times remain long.
- 3. Staff communication Proactive updates about estimated waiting times can reduce uncertainty and alleviate anxiety.

4. Patient-centered care – This study emphasizes the need for hospitals to integrate patients' perspectives into service evaluations, where quality is judged not only by clinical outcomes but also by the waiting experience.

Limitations

This study has several limitations:

- 1. Small sample size (8–12 participants), which limits the generalizability of the findings.
- 2. Phenomenological design, which relies heavily on participants' subjective experiences and may not reflect the perspectives of broader patient populations.
- 3. Focus on a single military hospital in Makassar, which may not represent the conditions in general or private hospitals with different management systems.
- 4. Lack of objective quantitative data (e.g., exact average waiting times in minutes), making it difficult to directly compare with national or international service standards.

These limitations open opportunities for future research using mixed methods with larger samples, objective waiting time measurements, and comparisons across different hospital settings in Indonesia.

CONCLUSION

This study concludes that patients' experiences of waiting for CT scan examinations at Tk. Il Pelamonia Hospital are shaped not only by the objective duration but also by psychological states, social support, and expectations. Long waiting times adversely affected physical conditions, caused anxiety and stress, disrupted daily activities, and lowered satisfaction with hospital services. Nevertheless, some patients perceived delays as acceptable, reflecting cultural and religious values. Effective communication and improved waiting facilities were identified as critical factors in reducing the negative impact of prolonged waits.

Practical Suggestions

Hospital management should:

- 1. Implement transparent and structured queuing systems, potentially supported by digital scheduling tools
- 2. Improve waiting room facilities by providing adequate seating, entertainment, Wi-Fi, and a comfortable environment.
- 3. Train staff to deliver proactive and empathetic communication, including updates on estimated waiting times, to reduce patient anxiety.

Research Suggestions

Future studies should:

- 1. Employ mixed-method designs to combine qualitative insights with quantitative measurements of actual waiting durations.
- 2. Involve larger and more diverse samples across different hospital types (military, public, and private) to enhance generalizability.

3. Explore the influence of cultural and religious factors in greater depth to better understand their role in shaping patient tolerance toward waiting times.

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