

PATIENT SATISFACTION AND AWARENESS DURING CT EXAMINATIONS AT THE CROATIAN HOSPITAL “DR. FRA MATO NIKOLIĆ” NOVA BILA

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ABSTRACT

Introduction: The WHO defines the quality of healthcare services as the degree to which health system goals that lead to improved health and meet the needs and expectations of the population are achieved. One of the most important changes relates to patients' rights during hospitalization – every patient has the right to be fully informed and to give consent for all procedures performed on them. The aim of this paper is to examine patient satisfaction and awareness regarding the quality of CT services provided by medical radiology engineers in our hospital, as well as to identify possibilities for improvement.

Methods: An anonymous survey was conducted as a cross-sectional study. The questionnaire consisted of a total of 8 questions. The first part of the questionnaire included sociodemographic data (gender, age). The rest of the questions focused on patient satisfaction with the

information provided about the procedures to be performed during the CT examination.

Results: The obtained results provide insight into patients' perceptions of the quality of provided services and the communication of healthcare staff, and can serve as a basis for improving work processes and raising the standards of care.

Conclusion: it was confirmed that the majority of patients were satisfied and well informed during CT scans. The majority of respondents (70.8%) rated their level of awareness as extremely high, while almost all patients stated that they had enough time to ask questions and that the medical radiology engineers clearly explained the examination procedure to them. Patients also noted the attentiveness of the staff during both the preparation and the examination itself, and most received information about the risks or possible side effects of the procedure (adverse reactions to the contrast agent).

Keywords: satisfaction, awareness, CT examination, medical radiology engineer.



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INTRODUCTION

With the development of technology and modernization of health care institutions, the expectations of users and the standards that determine the success of health care are also changing. One of the most important changes concerns patients' rights during hospitalization – every patient has the right to be fully informed and to give consent for all procedures performed on them. In this context, the need for an individualized approach that respects the dignity, needs and expectations of each patient is increasingly emphasized (1).

The quality of healthcare can be described as the degree to which the healthcare services provided, in accordance with current professional knowledge (defined standards), increase the likelihood of achieving desired outcomes (2). The World Health Organization (WHO) defines the quality of healthcare services as the degree to which the goals of health systems that lead to improved health and meet the needs and expectations of the population are achieved (3).

Many view the quality of healthcare from three different perspectives: 1. the patient's, 2. the professional, and 3. the managerial. Patients seek high-quality service, while professionals strive to meet patients' needs in the best possible way and to perform the necessary procedures correctly and appropriately to ensure the provision of quality care. The quality of management involves the efficient and effective use of available resources to meet patients' needs. (4).

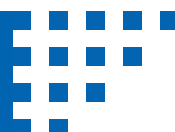
Patient satisfaction has increasingly come into focus within healthcare systems in recent years due to its key role in improving the quality of provided care. This term refers to the patient's

subjective assessment of their own experience in using healthcare services (5). Satisfaction encompasses various components, such as the experience of healthcare, the manner of communication and relationships with staff, the efficiency of the services provided, and the overall impression of the conditions within the healthcare facility (4–6). Today, it is considered one of the key indicators not only of quality but also of the efficiency of healthcare. It is important to distinguish between patient satisfaction and patient experience, although they are often used synonymously. Patient experience refers to their impressions of how healthcare was delivered, while satisfaction indicates the extent to which the care met their expectations (4,7).

Among the most widespread assessment techniques are structured surveys. Standard satisfaction questionnaires often include questions about communication between patients and healthcare staff, waiting times, and the overall impression of the service (8).

Human and communication skills of healthcare professionals – such as patient listening, clear explanations, and the expression of empathy – significantly contribute to a positive perception of healthcare (9).

The aim of this paper is to examine patient satisfaction and awareness regarding the quality of CT services provided by the Radiology Department in the Croatian Hospital "Dr. Fr. Mato Nikolić" Nova Bila, with an emphasis on recognizing the factors that influence the subjective assessment of awareness, and the possibilities for its improvement.



SUBJECTS AND METHODS

In this study, we analyzed the level of patient satisfaction and awareness during CT examinations at the Radiology Department of the Croatian Hospital “Dr. fra Mato Nikolić” in Nova Bila. The respondents were outpatients and hospitalized patients who underwent CT examinations either due to an acute condition or for follow-up purposes. Completed anonymous questionnaires are stored. Participation was voluntary and anonymous. The survey was conducted from May 1, 2024, to December 31, 2024, and included 65 participants. The obtained results provide insight into patients’ perceptions of the quality of provided services and the communication of healthcare staff, and

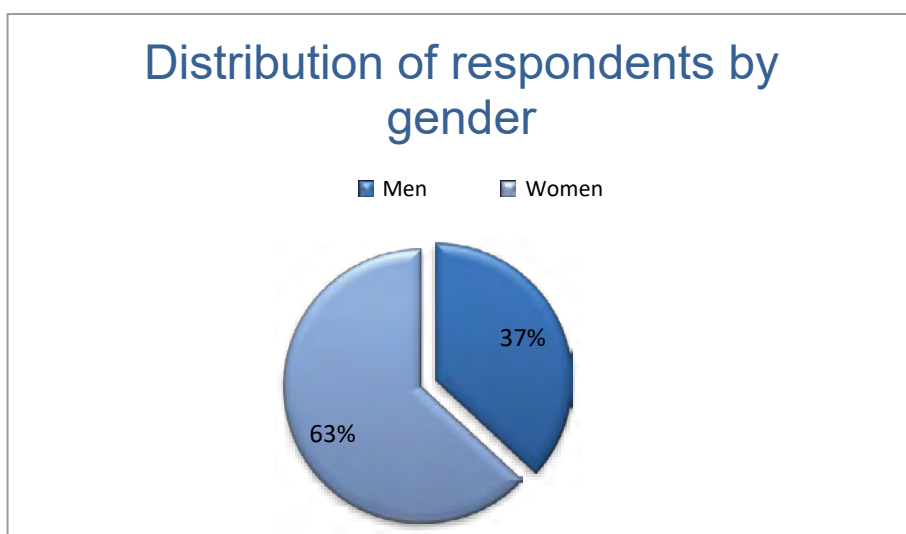
can serve as a basis for improving work processes and raising the standards of care.

The study was conducted as a cross-sectional study. An anonymous questionnaire based on the forms used in a number of hospitals was used. The questionnaire consisted of a total of 8 questions. The first part of the questionnaire included sociodemographic data (gender, age). The remaining questions focused on patient satisfaction with the information provided by medical radiology engineers about the procedures to be performed during the CT examination.

RESULTS

The chart shows the distribution of participants included in the study according to gender. Of the total 65 participants, 41 (63.1%) were female,

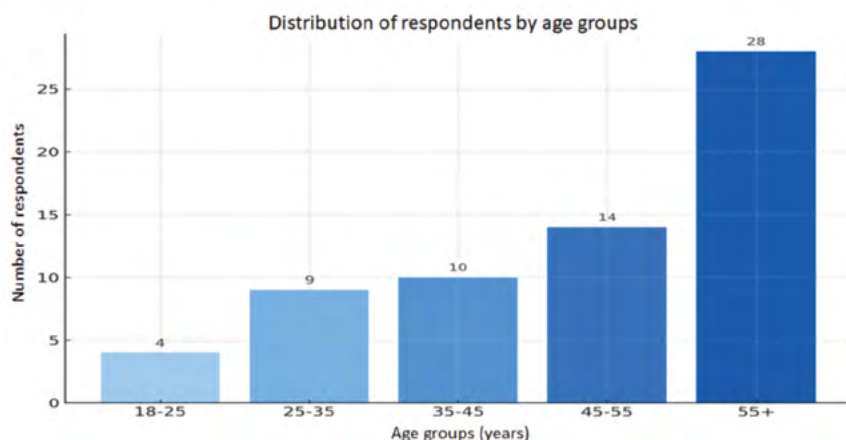
while 24 (36.9%) were male. The results show that more women than men participated in the study.



1. Distribution of respondents by gender

The chart shows the distribution of participants included in the study according to age. The largest number of respondents belonged to the group of 55 years and older (28 respondents; 43.1%), while the fewest respondents were in

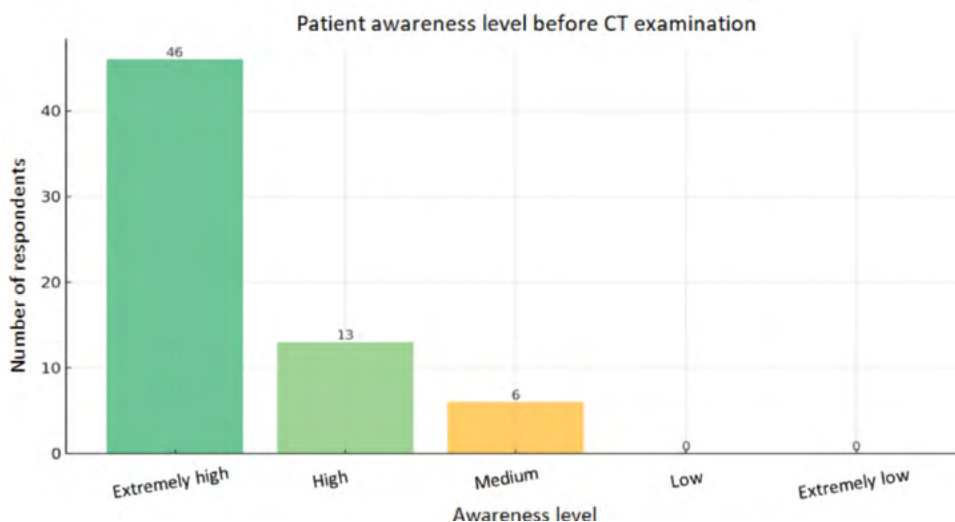
the group of 18–25 years (4 respondents; 6.2%). The age structure of the respondents indicates a higher representation of the older population compared to the younger age groups.



2. Distribution of respondents by age groups

The chart shows the assessment of the level of information that patients received from medical radiology engineers. The largest number of respondents, 46 (70.8%), rated the level of awareness as extremely high, while 13 respondents (20%) considered that they had

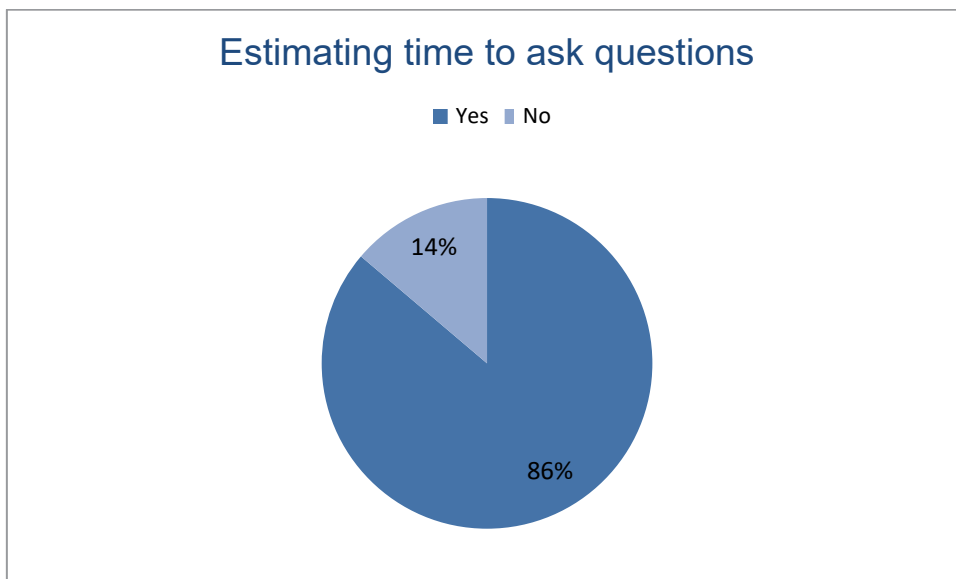
received enough information to understand the procedure. A moderate level of awareness was reported by 6 participants (9.2%), while none of the respondents rated their level of awareness as low or extremely low.



3. Patient awareness level before CT examination

The chart shows the respondents' answer to the question of whether they had enough time to ask a question or express concern to a medical radiology engineer. The vast majority

of respondents, 62 (95.4%), answered yes, while only 3 respondents (4.6%) stated that they did not have enough time to ask questions.



4. Estimating time to ask questions

The chart shows the respondents' answer to the question of whether they received a clear explanation of the examination procedure by a medical radiology engineer before the

start of the examination. The vast majority of respondents, 64 (98.5%), answered yes, while only 1 respondent (1.5%) stated that they did not receive a clear explanation

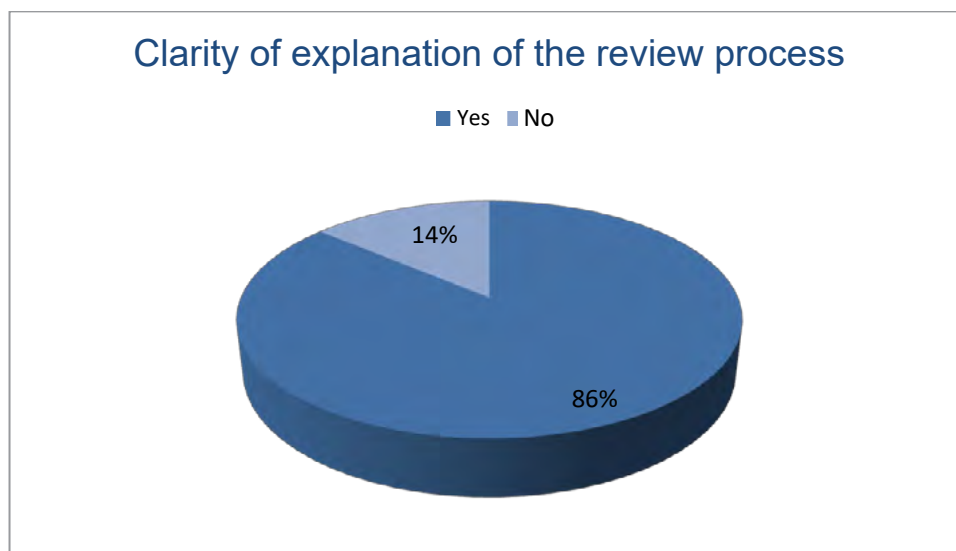
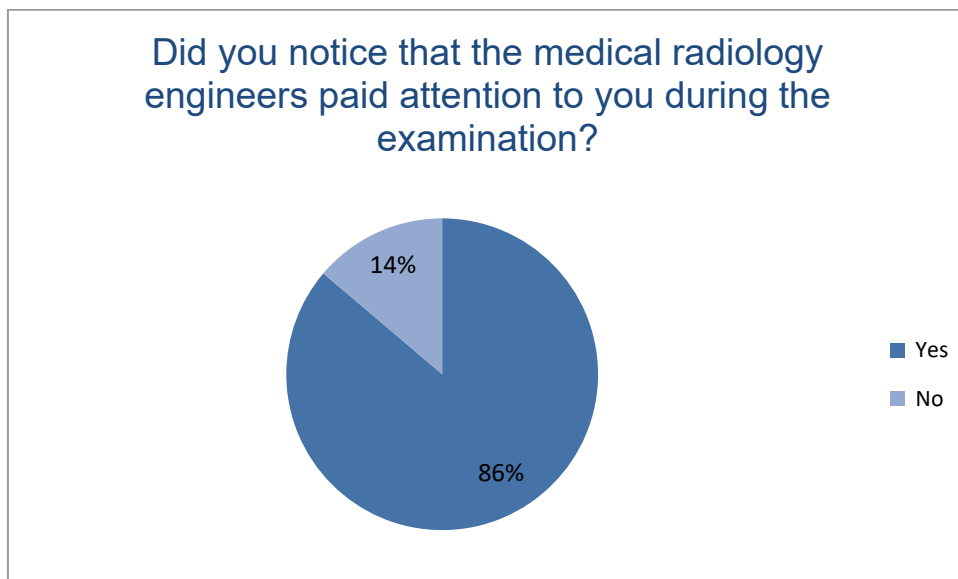


Figure 5. Clarity of explanation of the review process

The graph shows the respondents' answer to the question of whether they noticed that the medical radiology engineer paid attention to them during the examination. Almost all

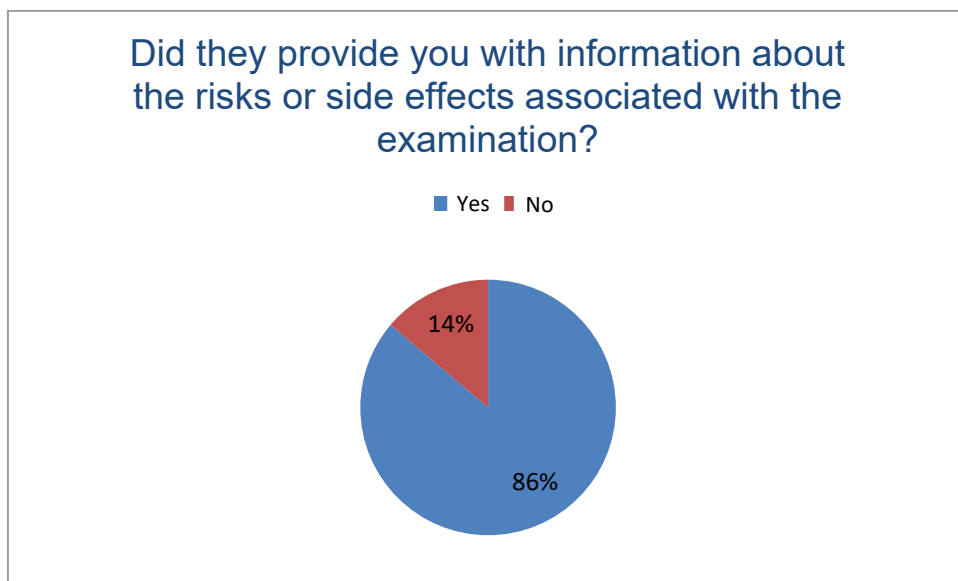
respondents, 64 (98.5%), answered yes, while only 1 respondent (1.5%) stated that he did not notice the attention of radiology engineer during the examination.



6. Attention of medical radiology engineers during the examination

The chart shows how much information the respondents received about the risks or side effects associated with the CT examination. The majority of respondents, 56 (86.2%), responded

that they had received this information, while 9 respondents (13.8%) indicated that they had not received information about possible risks or side effects.



7. Information on risks or side effects associated with the examination

DISCUSSION

The results of the research showed a very high degree of satisfaction of the respondents with the services provided during the CT scan at the Department of Radiology of the Croatian Hospital “Dr. Fra Mato Nikolić” in Nova Bila. Patient awareness measurement gives us insight into the strengths and weaknesses of the quality system in healthcare and encourages activities to improve the quality of healthcare (10).

Patient satisfaction not only reflects their personal experience with the services provided, but also has a significant impact on trust in the health system and motivation for further cooperation in treatment. A high level of patient satisfaction within the healthcare system is of crucial importance, as it can influence overall treatment outcomes, quality of care, and patients’ perception of safety (1).

The obtained results indicate a high level of patient satisfaction with the information provided during CT examinations. The largest

share stated that they were “very satisfied” with the amount and clarity of CT examination information.

The obtained figures confirm the strong educational component of medical radiology engineers and their effectiveness in ensuring patient satisfaction.

Clear and timely communication with patients is one of the key determinants of perceived quality of healthcare. It is particularly noteworthy that only one respondent (1.5%) stated they did not receive a clear explanation, which is consistent with the results of a study conducted in Portugal, where the provision of quality information was identified as the main predictor of satisfaction (Abidova et al., 2020) (11).

Only 3 respondents (4.6%) stated that they did not have enough time to ask questions. This indicates the need to approach patients with greater empathy and communication, which would further improve the results.

CONCLUSION

The research conducted at the Department of Radiology of the Croatian Hospital “Dr. Fra Mato Nikolić” in Nova Bila showed that the majority of patients were satisfied and well informed during CT examinations. The majority of respondents (70.8%) rated their level of awareness as extremely high, while almost all patients stated that they had enough time to ask questions and that the medical radiology engineers clearly explained the examination procedure to them. Patients also noted the attentiveness of the staff during the examination, and most received information about the risks or possible side

effects of the procedure (adverse reactions to the contrast agent and, upon inquiry, information about the potential effects of ionizing radiation).

The results show that effective communication and adequate patient information significantly contribute to their satisfaction and sense of safety during the diagnostic procedure. These findings highlight the importance of a continuous educational approach and professional staff conduct, which can contribute to an even higher standard of care and improved cooperation between patients and medical personnel.



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