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The quality of care received by patients during general X-ray procedures at a public hospital in Namibia: a cross-sectional survey

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Abstract

Patient care has been the major focus of most healthcare discussions, as a way to reinforce strategies that ensure care is of benefit to patients. Understanding the interactions between the patient and radiographer unlocks various opportunities to deliver improved patient care. The purpose of this study was to assess the quality of care received by patients and determine its contributing factors as perceived by patients during the general X-ray examinations. The study used a quantitative, descriptive and cross-sectional survey design. Data were collected from 66 purposefully sampled participants, using a questionnaire. The quality of care for different phases of the radiographic procedures was

analysed and the relationships between dependent and independent variables, as well as identified contributing factors, were measured using SPSS version 25. The quality of care rendered to patients in the radiography department before the commencement of the procedure, during the procedure and after the procedure was rated as good, by 77.3%, 81.8% and 68.2%, of the patients respectively. The overall quality of care received by the patients was rated as high, by 89.4% of the patients. Poor communication, overcrowded rooms, radiographers and receptionists´ attitudes were factors highlighted by patients as affecting the quality of care they received. Most patients rated highly the quality of care rendered during radiographic procedures, with a few areas reported as negatively affecting this care. Continuous professional development on communication and patient-centred care for radiographers is recommended to improve and maintain the quality of care rendered to patients.

Introduction

Quality of care in the health sector is defined as the extent to which healthcare services provided to individuals and populations increase the likelihood of a positive treatment outcome [1]. It is an indicator of the performance of a health system and its ability to achieve the desired goal [2]. Patient care must achieve the health care goals that are determined by the preferences and values of those patients and populations who receive it [1]. Patient care has been the major focus of most healthcare discussions, as a way to reinforce strategies that ensure care is of benefit to patients [3,4]. The nature of communication between patients and healthcare workers can positively or negatively influence the quality of care that patients receive [5,6]. Patient-doctor or radiographer interactions are essential for creating a good relationship that enables the exchange of information and facilitates treatment-related decisions [7]. Furthermore, the patient charter indicates that patients should always be given adequate personal space and privacy during procedures, especially in radiography where they in most cases need to undress or expose part of the body parts [8]. It also states that patients have the right to receive care in a non-discriminatory way. Radiographers' clinical professional work comprises of a three-part process, that is, pre-, intra- and post-procedural care [9]. This radiographic process is also composed of three aspects which are planning, producing images and evaluation, which are all part of a radiographers' clinical work [10]. Though radiographers consider some of the general X-ray examinations as routine duties, these investigations are not routine for the patients receiving them. They can be stressful and uncomfortable which can result in both physical and emotional stress among patients [11]. Dealing effectively with such clinical situations requires one to show empathy and sensitivity to the needs of others. To maximize the quality of care, the radiographers should have a general understanding of the psychology involved which would provide a basis for a more compassionate and professional medical procedure [12].

Assessing the quality of services provided by radiographers is crucial for continuous professional improvement [13]. By measuring patients´ perceptions, healthcare service providers gain essential information that can be used to improve the quality of healthcare services [14]. The quality of care aspects are usually measured and reflected in various questionnaires that are used to monitor patient experiences, such as the consumer assessment of healthcare providers and systems and the patient perception of hospital experience with nursing care [15-17]. Patients are assessed on the aspects of care they find important and about their actual experiences during treatment [18]. The participating hospital in this study is a tertiary institution that receives referrals from various smaller secondary and primary hospitals. It houses a radiology department where general X-rays, CT scans, sonar and fluoroscopy procedures are performed. There have been some complaints raised by patients regarding the quality of care rendered to them

during radiological procedures in this radiology department and hospital at large. Radiographers who are actively involved in carrying out radiological examinations require an understanding of the positive and negative effects of an examination on the patient [19]. These radiographers must assess patient situations; exercises care, discretion, and judgment; assume responsibility for professional decisions, and act in the best interest of the patient [20]. When radiographers approach patients with only a clinical understanding, they may appear insensitive and unsupportive. Careless actions and words may cause negative outcomes of unknown magnitude to patients and in this case, it remains unclear the impact of actions by the radiographers on the psychological wellbeing of the patients and their experience regarding the quality of service. This study aimed at assessing the quality of care received by patients and its contributing factors as perceived by patients during the general X-ray examination.

Methods

A quantitative, descriptive and cross-sectional survey design was used in this study. Data were collected at a tertiary hospital in Windhoek Namibia. This hospital receives patient referrals from all regions of Namibia. It houses a radiology department that provides imaging services across several modalities. Data were collected from 66 purposefully selected patients who visited the radiology department for the general X-ray procedures who consented to participate in the study. Only adult patients above the age of 18 who were able to comprehend the study questions were included in the study. Mentally ill patients, unconscious and uncooperative patients were excluded from the study. Patients were approached as soon as they settled down in the waiting room after completion of the radiographic procedure. An explanation about the study purpose, objectives and procedures was verbally given to the patients before they were invited to participate in the study. Where necessary, further clarifications were provided and questions and concerns were addressed before those who agreed to participate in the study signed the informed consent. Patients were informed that their participation was voluntary and that they can withdraw from the study at any time without any consequences. Those who refused to participate were given their X-ray results and proceeded back to the referring doctors without any prejudice.

A questionnaire consisting of open and close-ended questions assessing various aspects of quality of care during the radiological procedure was used to collect data. The questionnaire was developed by the researchers and was pre-tested using a pilot study on 5 patients to ensure validity and reliability. It consisted of three sections; section A assessing patient characteristics; section B assessing pre, intra and post-procedural care and section C assessing the perceived factors affecting the quality of care. All participants were urged to answer the questionnaire in private and provide honest responses to minimize social desirability bias. Data were collected during the day utilizing both self-administered and researcher administered methods. The data were analyzed with the Statistical Package for Social Sciences (SPSS) version 25.0. Categorical variables were expressed using descriptive statistics such as frequencies and percentages. Quality of care was assessed for the pre, intra and post-procedural phases of the procedures and reported as such. Furthermore, the overall quality of care was also reported as an aggregate of the different indicators in the questionnaire. Individual statements for the three phases of the procedure were scored and totaled before being categorized as good or poor quality of care, using the average score as the cut-off point. The association between the patient demographics and the reported quality of care was assessed using a Chi-square test with the alpha level set at $p < 0.05$.

Ethical considerations: permission to collect data was obtained from the Ethical committee of the Ministry of Health and Social Services (Ref: 17/3/3ALK) whilst access permission was granted

by the medical superintendent of the participating hospital. Participation in the study was voluntary, and patients were allowed to decline or withdraw from the study without any consequences. Each participant signed informed consent before taking part in the study. All collected data were kept confidential in a lockable locker cabinet. Furthermore, no personal identifying information such as patient name or identity number was collected. Unique identifies were, however, used to code the questionnaires.

Results

A total of 66 patients participated in this study, of which, 28 (42.4%) were male and 38 (57.6%) were female. Of these, 4 (6.1%) participants belong to 18-20 years, 43 (51.5%) participants belong to 21-30 years, 15 (22.7%) participants belong to 31-40 years and 13(19.7%) belong to 41-50 years. A total of 16 participants (24.2%) were married, while 49 (74.2%) were single. Regarding their religious affiliation, 3 participants (4.5%) were Muslims, 62 participants (93.9%) were Christians and 1 participant (1.5%) was Jewish. The majority of the participants were referred for extremities (37.9%) and chest (36.4%) X-ray procedures, while a few were referred for the spine (16.7%) and skull (9%) procedures.

Quality of care for the entire procedure: quality of care was assessed during the three phases of an X-ray procedure namely registration (phase 1), during the procedure (phase 2) and after the procedure (phase 3) as shown in Table 1. During the registration phase, the majority of the patients indicate that they were greeted properly with respect (89.4%), were given proper instructions (81.8%) and understood all the instructions (78.8%). However, a significant percentage (47%) waited for a long time before getting help, while 54.5% did not receive any information about their X-ray procedure before the appointment. During the actual procedure, 69.7% of the patients indicated that the radiographer explained the procedure and 90.9% indicated that they were listened to as they explained their condition. Most of the patients, 80.3% and 86.5%, were given privacy during the radiographer-patient discussion and the procedure respectively. However, for 50% of the patients, the radiographers did not introduce themselves and 22.7% felt threatened by the radiographer or other people in the X-ray room. After the procedure, most of the patients (81.8%) were told how they would receive their results. Only 31.8% and 36.4% were not told what to do next and where to go after the procedure, respectively. The quality of care before, during and after the procedure was rated as good by 77.3%, 81.8% and 68.2% of the patients respectively as indicated in Table 2. The overall quality of care for all three phases was rated as good by 89.4% of the patients.

The general aspects of the radiology department: the cleanliness of the radiology department including toilets was rated as excellent, good and poor by 36.4%, 54.5% and 9.1% respectively. The quality of the changing rooms was rated as excellent by 34.8%, good by 45.5% and poor by 19.7% of the patients. The combined service offered by the receptionist and radiographer was rated as excellent by 21.2%, good by 77.3% and poor by 1.5% of the patients. Most of the patients, 92.4% and 95.5%, agreed that the radiographer's attitude and poor communication are factors that affect the quality of care in the radiology department, respectively. Furthermore, 97% of the patients indicated that overcrowded X-ray rooms affect their privacy and comfort.

Improvements suggested by patients to enhance the quality of care: some patients, 9.1% and 4.5% indicated that radiographers and receptionists need to improve their attitudes and speed up the registration process respectively. Furthermore, 19.7% of the patients indicated that radiographers need to improve their communication skills and give clear instructions to the patients. In addition, 7.5% indicated that hygiene in the radiology department needs to be improved because they were unhappy with the cleanliness of the X-ray and changing rooms. However, 16.7% of the

patients felt that the quality of care was optimum and there was no need for any improvement.

Discussion

The majority of the participants were female and very young Christians that were single. A similar study in Nigeria also reported a majority of young female participants under thirty years of age in their study [21]. The current findings are in line with the Namibian population characteristics, where the majority are females and Christianity is the dominant religion [22]. In 2017, Namibian´s female population was reported to be approximately 1.29 million, while the male population was about 1.21 million [23]. Religious beliefs and prescriptions have been shown to influence the perception of quality of care received by patients during radiographic procedures, especially among Moslem women where body exposure and body handling by the opposite gender is deemed inappropriate [24]. This provides further emphasis on the need to respect the patients´ needs, values and preferences as a way of implementing patient-centred care [25]. Most of the patients were referred for extremities and chest radiography examinations and these are the most common examinations performed in the radiology department.

Quality of care during the registration process: the majority of the participants reported that they received good quality of care during the registration process, while a few participants reported that the quality of care was poor. In terms of how the patient was greeted, the current study findings are comparable to earlier results by Beyer and Diedericks [26], where the majority (96%) of patients reported that they were greeted properly by the radiographers and receptionists. However, 32% of the patients in the same study also reported that the receptionists and radiographers were rude and unfriendly. According to the National Patient Rights Charter, patients have a right to be treated with respect and dignity by a named health care provider [21]. Thus, all patient interactions must reflect and show the application of this principle in the radiography department. There was no significant difference in the reported quality of care between males and females in this study (p=0.331). However, the type of examination requested significantly affected the reported quality of care during registration by patients (p=0.019). Wahed and Mabrook also reported a significant difference in satisfaction with care by patients referred for different imaging procedures (p=0.037) [27]. As different examinations require different instruction and preparation, patients may thus comprehend this differently resulting in a varied perception of the quality of the service. Radiographers are therefore supposed to contextualize their instructions to best suit the patient's needs and conditions whilst covering all the necessary information for the particular examination or procedure.

Quality of care during the procedures: the majority of the participants reported that they received good quality care during the radiography procedure and indicated that the radiographers that helped them explained the whole procedure in a way they clearly understood. A previous study reported that 92% of patients indicated that the radiographers properly answered their questions, with only 8% perceiving the radiographer´s reactions as rude and unfriendly during the procedure [26]. The radiographer needs to give a clear explanation to the patient for the patient to understand the radiography procedure instructions and any associated information. When instructions are unclear during the procedures, it can lead to repetition of radiographs, resulting in increased radiation dose to patients. A study by Mulisa *et al*. reported similar findings where the overall patient satisfaction towards radiological service was 71.6% while satisfaction regarding the accessibility of the service and courtesy of the staff was reported at 84.5% and 80.6%, respectively [28]. Most participants in the current study reported that they were given enough

privacy during the imaging procedure. This is different from findings by Beyer and Diedericks where some of the patients (12%) reported that their privacy was violated during the procedure due to unfamiliar people entering the imaging room [26]. It is essential to remember that patients have a right to privacy and confidentiality at all times as stipulated by the Patient Charter of Namibia [8]. Dissatisfaction with privacy may be attributed in part to the poor conditions of changing rooms, waiting areas, and the design of examination rooms. Patients often feel a sense of intrusion of their privacy, when the examination rooms are not guarded against other staff and patients [27]. Furthermore, the presence of too many staff members or students in the room may be inappropriate and violate patient privacy. Consideration should therefore be given to the necessity of the staff inside the examination room during the procedure to ensure that the patient can still be afforded their privacy.

Quality of care after the procedure: the results of this study show that the majority of the participants reported that they received good quality of care after the procedure with a few who reported that they received poor quality care. Some participants reported that they were given clear explanations of how they would receive their results (radiographs). The majority of the participants indicated that they were told to wait outside in the waiting area. Few participants indicated that they were told to go back to their referral doctors. It is the responsibility of the radiographer to tell the patients where to go after giving them the results are not familiar with the hospital and they might not know where to go [9]. It may be inaccurate to assume that all patients are aware of the steps to follow after the procedure is completed thus radiographers need to clearly direct all patients to the next point of care.

The overall quality of care in the radiology department: most of the participants reported that the overall quality of care was good in the radiography department. Similarity findings by Wahed and Mabrook and Mulisa *et al.* [27,28] reported that most of the participants indicated satisfaction with the overall quality of care in the radiography department at 92.7% and 71.6%, respectively. Radiographers have an ethical and professional obligation to their patients in their daily conduct in hospital settings [21]. They also ought to treat patients with respect, dignity, privacy and confidentiality, as demanded by the patient charter of Namibia [8]. Furthermore, radiographers are obligated to ensure a safe working environment in the department and are legally accountable for their professional negligence in practice. With adequate training on radiographic technique, patient care and radiation protection, radiographers are well-positioned to offer a service that meets the patient´s expectations and satisfy the attributes of quality service.

Factors that affect the quality of care in the radiology department: the majority of the participants indicated that the radiographer´s attitude and poor communication affects the quality of care they received in the radiography department. Similarly, Wahed and Mabrook [27] reported high levels of patient dissatisfaction with the explanation of the radiographic procedure to the patient. They attributed the ineffective communication with patients to high patient volumes in their facility, which add pressure to the radiographers to limit the time per procedure. The current study also showed that most of the participants agreed that overcrowding affects the quality of care they received during the general radiographic procedures. Overcrowded rooms hamper the development of patient-radiographer rapport, preventing patients from opening up about their conditions to the radiographer and compromising patient privacy during the radiological procedures. Communication was identified by most participants as an area requiring improvement in this study. Effective communication between radiographers and their patients plays a crucial role in ensuring the success of the procedure and, if not done properly, may

lead to poor quality of care in radiography [29]. Participants suggested improvements in explanations during the procedures for them to understand and know what is expected of them. Furthermore, participants indicated that the radiographers and receptionists should improve their attitude when interacting with patients. Staff attitude was also previously identified as a contributor to patient dissatisfaction with the quality of healthcare [30]. It is therefore imperative that staff continuously improve and exhibit a positive attitude towards their patients as a way of improving the quality of care.

Limitations: the study utilized a self-reporting questionnaire that may be prone to self-reporting bias. However, all participants were encouraged to be honest in their responses.

Conclusion

The overall quality of care received by the patients in the radiography department was rated as very high. Patients were more satisfied with the quality of care received during the radiographic procedures. Patients indicated that the most crucial improvement needed in the radiology department was communication. Communication challenges are common in the radiography department, which requires urgent attention to enhance patient satisfaction and enhance the quality of care. Radiographers are responsible for the well-being of their patients whilst in their care. The current study showed that poor communication, overcrowded rooms, radiographers' and receptionists´ attitudes are some of the factors that affect the quality of care received by patients in the radiology department. The generalizability of the findings is limited to similar contexts due to the small sample size.

Recommendation: radiographers should regularly reflect on the Patient Rights Charter to remain abreast with patients´ rights and their obligation during radiologic examinations. Regular in-house training and continuous professional development programmes must be provided by the department to focus on the quality of care in radiography, patient-centred care and medical ethics.

What is known about this topic

- *Patient care is crucial in the provision of quality service;*
- *Perception of quality of care is a combination of numerous factors.*

What this study adds

- *Patients were highly satisfied with the quality of care in the radiography department;*
- *Radiographers' attitude and communication skills need to be improved to enhance patient care;*
- *Patient-centred care should be emphasised in the radiography departments.*

Competing interests

The authors declare no competing interests.

Authors' contributions

AK and ALK conceptualised the study, ALK collected data, AK, LI, MA and ALK analysed data and discussed the findings, AK, MA and LI drafted the manuscript, AK, LI, MA and ALK corrected and finalised the manuscript. AK guarantees the integrity of the study. All the authors have read and agreed to the final manuscript.

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Tables

Table 1: indicators of quality of care during the procedure

Table 2: overall quality of care during the procedure

References

1. World Health Organization. Handbook for national quality policy and strategy: a practical approach for developing policy and strategy to improve quality of care. Geneva. World Health Organization. 2018. **Google Scholar**
2. Busse R, Panteli D, Quentin W. Characteristics, effectiveness and implementation of different strategies. Copenhagen (Denmark), World Health Organization. 2018.
3. OECD. Caring for quality in health: lessons learnt from 15 reviews of health care quality. Paris OECD Publishing. 2017.
4. World Health Organization. Delivering quality health services: a global imperative for universal health coverage. Geneva, World Health Organization. 2018.
5. Mehra P, Mishra A. Role of communication, influence, and satisfaction in patient recommendations of a physician. J Decis Makers. 2021;46(2): 99-111. **Google Scholar**
6. Begum T. Doctor patient communication: a review. J Bangladesh Coll Physicians Surg. 2014;32(2): 84-88. **Google Scholar**
7. Ugwu AC, Ahamefule K, Egwu OA, Otu E, Okonkwo CA, Okafor LC. Patient satisfaction with obstetric ultrasonography. Radiol Technol. 2007;79(2): 113-118. **PubMed**| **Google Scholar**
8. MOHSS. **Patient charter**. 2013. Accessed May 3, 2021.
9. Ehrlich RA, Coakes D. Patient care in radiology: with an introduction to medical imaging. Missouri. Mosby. 10th ed. 2020. **Google Scholar**
10. Lundgren SM, Lundén M, Andersson BT. Radiography - how do students understand the concept of radiography. Radiography. 2014;21(2): e68-e73. **Google Scholar**
11. Tervo-Heikkinen T, Kvist T, Partanen P, Vehviläinen-Julkunen K, Aalto P. Patient satisfaction as a positive nursing outcome. J Nurs Care Qual. 2008;23(1): 58-65. **PubMed**| **Google Scholar**
12. Özsoy SA, Özgür G, Durmaz Akyol A. Patient expectation and satisfaction with nursing care in Turkey: a literature review. International Nursing Review. 2007;54(3): 249-255. **PubMed**| **Google Scholar**
13. Hoe J. Quality service in radiology. Biomed Imaging Interv J. 2007;3(3): e24. **PubMed**| **Google Scholar**
14. Tang WM, Soong C, Lim WC. Patient satisfaction with nursing care?: a descriptive study using interaction model of client health behavior. Int Journal Nurs Sci. 2013;3(2): 51-56.
15. Alanazi MR, Alamry A, Al-Surimi K. Validation and adaptation of the hospital consumer assessment of healthcare providers and systems in Arabic context: evidence from Saudi Arabia. J Infect Public Health. 2017;10(6): 861-865. **PubMed**| **Google Scholar**
16. Tieman J. A standard approach. AHRQ readies tool to gauge patient satisfaction. Mod Healthc. 2004;34(47): 8-9. **PubMed**| **Google Scholar**
17. Coban GI, Kasikci M. Reliability and validity of the scale of patient perception of hospital experience with nursing care in a Turkish population. J Clin Nurs. 2010 Jul;19(13-14): 1929-34. **PubMed**| **Google Scholar**
18. Triemstra M, Winters S, Kool RB, Wiegers TA. Measuring client experiences in long-term care in the Netherlands: a pilot study with the consumer quality index long-term care. BMC Health Serv Res. 2010 Apr 12;10: 95. **PubMed**| **Google Scholar**
19. Ugwu AC, Shem SL, Erondu F. Patients´ perception of care during special radiological examinations. African J Prim Heal Care Fam Med. 2009;1(1): 100-102. **Google Scholar**

20. Watson L, Odle TG. The technologist´s role in patient safety and quality in medical imaging. Radiol Technol. 2013;84(5): 536-541. **PubMed**| **Google Scholar**
21. Ogbonnia GO, Bartholomew SE, Charles UE. Differentials in patients satisfaction with routine radiological services: a cross-sectional study in a developing country. African Journal of Business Management. 2016;10(18): 429-439. **Google Scholar**
22. United States Department of State. Namibia International Religious Freedom Report for 2020. Washington DC. 2020.
23. Legal Assistance Centre. Namibia gender analysis. Windhoek. 2017.
24. Hasnain M, Connell KJ, Menon U, Tranmer PA. Patient-centered care for Muslim women: provider and patient perspectives. J Women´s Heal. 2011;20(1): 73-83. **PubMed**| **Google Scholar**
25. Itri JN. Patient-centered radiology. Radiographics. 2015;35(6): 1835-1848. **PubMed**| **Google Scholar**
26. Beyer L, Diedericks P. The attitudes of radiographers toward patients in government hospitals in Bloemfontein. South African Radiogr. 2010;48(2): 22-27. **Google Scholar**
27. Wahed W, Mabrook S. Assessment of patient satisfaction at radiological department of Fayoum University Hospitals. Int J Med Dev Ctries. 2017;3(1): 126-131. **Google Scholar**
28. Mulisa T, Tessema F, Merga H. Patients´ satisfaction towards radiological service and associated factors in Hawassa University Teaching and referral hospital, Southern Ethiopia. BMC Health Serv Res. 2017;17(1): 1-11. **PubMed**| **Google Scholar**
29. Choong YKE, Tay J, Binte Abdul Razak ANY, Look MA, Sng LH. Bridging the communication gap between radiographers and patients to improve chest radiography image acquisition: a multilingual solution in the COVID-19 pandemic. Radiography. 2021;27(3): 873-876. **PubMed**| **Google Scholar**
30. Hasin MAA, Seeluangsawat R, Shareef MA. Statistical measures of customer satisfaction for health care quality assurance: a case study. Int J Health Care Qual Assur. 2001;14(1): 6-13. **Google Scholar**

Table 1: indicators of quality of care during the procedure		
Quality of care indicators	**Yes n(%)**	**No n(%)**
Phase 1 - registration process		
Were you greeted in a proper manner and with respect	59 (89.4%)	7 (10.6%)
Were you given proper instructions during the registration process	54 (81.8%)	12 (18.2%)
Did you understand all the instructions you were given before the procedure	52 (78.8%)	14 (21.2%)
Did you wait for too long before you get helped	31 (47%)	35 (53%)
Did you receive the information about your x-ray procedure before your appointment	30 (45.5%)	36 (54.5%)
Phase 2 - during the general X-ray procedures		
Did the radiographer that helped you introduce him/herself	33 (50%)	33 (50%)
Did the radiographer explain the whole procedure to you and did you understand everything	46 (69.7%)	20 (30.3%)
Were you given enough privacy when discussing your condition with the radiographer	53 (80.3%)	13 (19.7%)
Were you given enough privacy when you were being examined/treated	57 (86.55%)	9 (13.45%)
Did the radiographer listen to what you had to say about your condition	60 (90.9%)	6 (9.1%)
While you were in the X-ray room, did you feel threatened by the radiographer or other people that were in the room	15 (22.7%)	51 (77.3%)
Phase 3 - after the procedure		
Did the radiographer give you a clear explanation of how you would receive your results	54 (81.8%)	12 (18.2%)
Were you told what to do next after the procedure	45 (68.2%)	21 (31.8%)
Were you told where to go after you get your results	42 (63.6%)	24 (36.4%)

Table 2: overall quality of care during the procedure		
Procedure phase	**Level of quality of care**	
	Good quality n(%)	**Poor quality**
Registration process	51 (77.3%)	15 (22.7%)
During the procedure	54 (81.8%)	12 (18.2%)
After the procedure	45 (68.2)	21 (31.8%)