

The role of communication between mammographers and patients in the Limpopo province of South Africa

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Abstract

Introduction: Breast cancer affects women around the world. Communication is essential for managing and treating breast cancer, especially in the breast imaging department. By communicating effectively, mammographers can help to alleviate the fear and burden that breast cancer brings to the lives of affected women. In this study, we explored and described the role of communication between mammographers and post-mastectomy patients in the Limpopo province of South Africa.

Methods: This was a qualitative exploratory, descriptive study. Individual in-depth interviews were conducted with patients who underwent mastectomy as well as mammographers in selected healthcare institutions. Due to the different languages used in Limpopo, the researcher had this questionnaire for patients translated in Sepedi. Participants were purposively sampled. Data collection took approximately two months. Summative content analysis was used to analyse the data.

Results: Eleven mammographers and 36 patients were interviewed. Three themes emerged from the data collected. Mammographers highlighted the importance of being accommodative, supportive, and sympathetic towards patients. Mammographers made every effort to maintain a good communication path and understanding with their patients. The patients had high admiration for the work and support of mammographers and perceived mammographers as healthcare providers who were trustworthy and held them in high regard.

Conclusion: Communication is key in ensuring cooperation between mammographers and patients. Additionally, the mode of communication, including the language should be considered. It is important that patients receive information in languages they are comfortable in. It will help patients understand the proceedings of the examination for which they have been booked for as well as the need for follow-up. Training related to communication for mammographers and possibly the addition of more South African languages as an extra course/module to allow communication with patients to be well carried out.

Implications for practice: The study contributes to a growing body of knowledge within the training of mammographers as well as the implementation of role extension for mammographers.

Keywords: Breast cancer; Communication; Mammographer; Mastectomy; Post-mastectomy patient

Introduction

Communication in healthcare service delivery is key in ensuring cooperation between healthcare professionals, as well as between healthcare professionals and their patients. Similarly, communication in breast cancer imaging is essential for the best outcomes in terms of treating and managing this condition. Patel and Parikh¹ state that mammographers and ultrasonographers spend more time with breast cancer patients than any other health professionals. For this reason, they recommend that mammographers should be trained to educate patients about breast cancer, breast imaging, and associated activities.¹

Breast cancer is the most common and leading cause of death in women 40 years and older with post-menopausal women being more prone to developing breast cancer.² Globally, the fight against breast cancer has led to high treatment standards, management, and awareness. According to the Breast Cancer Prevention and Control Policy, South Africa, the increasing incidence of breast cancer is a major health concern.³ Breast cancer patients are usually attended by a multidisciplinary team comprising mammographers, oncologists, radiologists, physicians, nurses, surgeons, and counsellors to facilitate diagnosis and care and ensure strategies for timely access to treatment.⁴

Schapira and Barlow state that the lack of effective communication between health care providers, patients and imaging facilities might result in a delayed diagnosis and possible widening of disparities.⁵ According to the authors, communication plays a very important role in ensuring diagnosis and treatment of patients is not compromised. Therefore, should there be lack of communication between the health provider and the patient or failure to communicate important information to the patients, that might have negative impact or delays on the diagnosis.⁵

Effective communication ensures that important information is communicated to patients. Owing to the nature of their work, mammographers tend to have a more prominent patient-practitioner relationship as they are in close proximity to patients who have been diagnosed with breast cancer.⁶ By communicating and educating patients, mammographers can contribute to the early detection of breast cancer.⁷ To further emphasise on the importance of communications, the researchers would like to make reference to the International Classification of Functioning, Disability and Health (ICF), which, encourages the holistic view and management of patients. This aligns very well to the definition of health, by the World Health Organisation (WHO), which is; “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”.⁸ The ICF further considers the standardised communication among healthcare professionals and patients as being important in the management and treatment of different clinical conditions, including breast cancer.

The way in which healthcare professionals communicate among themselves and with patients, plays an important role in patients’ experiences during breast imaging procedures, like the mammography department. Positive and effective communication from mammographers allows information and knowledge to be transferred to patients, which reduces anxiety, allows the patient to ask questions, and improves overall patient

engagement.⁹ Bick et al., recommend that special attention be paid to a proper and tactful approach when communicating to the woman with breast cancer.¹⁰

Mammographers are trained diagnostic radiographers with postgraduate specialisation in mammography. This the definition according to the Regulations of the Health Professions Council of South Africa (HPCSA), for screening, diagnosing, or treating purposes.¹¹ Mammographers are thus in close proximity to patients from the diagnosis stage to even beyond mastectomy. Mammographers are responsible for providing emotional assurance and providing information regarding breast conditions according to their scope of practice.¹¹ The scope of practice of diagnostic radiographers, as outlined by the Professional Board for Radiography and Clinical Technology (PBRCT) of the HPCSA, guides performance and limits any practice that may be harmful or unethical to patients. Radiographers need to be able to provide optimum care, know about human rights, ethics, and health laws; as well as being able to work in multidisciplinary healthcare settings.

Mammographers also act as links to transfer information between patients and radiologists. The relationship between patients and mammographers must, therefore, be sound to ensure that radiologists' recommendations for possible follow-up procedures are well communicated and understood by patients.¹² Relating the subject of mammographers communicating with patients to the Gap-Kalamazoo Communication Skills Assessment Form (GKCSAF), mammographers require certain essential skills.¹³ The example of skills needed can be related to what was found in a study, that was conducted by Louw et al. This study listed the four traits, according to which the patients rate mammographers. The four traits are a) the way the mammographers instil trust, b) the care they give, c) how safe they make a patient feel, as well as d) how well they communicate.¹⁷ It is important to note that communication is overarching as the first three traits depend on communication.¹⁴ As patients enter the imaging department, mammographers have to consider the history of the patient, reassure the patient that the mammogram is needed, and explain the imaging procedure. Mammographers need to obtain the best quality images. A patient who might have undergone a mastectomy might be uncomfortable and feeling low in confidence. In such situations, mammographers need to be empathetic and sensitive to put the patient at ease. Following the procedure, the mammographer sends the images to the radiologist for reporting. Diagnostic radiographers, including mammographers, are not responsible for interpreting images and do not communicate mammography findings to patients.

According to Priyanath et al.¹⁵ there is a need to improve communication with patients after their imaging procedures. There is a need for clear and effective communication between patients, radiologists, referring physician teams, and the patients themselves. The need is evident in the mammography department. Most women stated that they would prefer direct communication with radiologists to discuss and be informed of the results of their mammograms.¹⁵ Schapira and Barlow⁵ further highlighted two modes of communication between mammographers and their patients, namely verbal or written communication. This study was conducted in the Limpopo province, which is characterised by low educational levels and poor socioeconomic status, making it necessary to carefully consider the use of both verbal or written communication. The question that this study was attempting to answer

was: “What is the communicative role of mammographers before, during and after imaging post-mastectomy patients?”

Mammographers are responsible for choosing the best mode of communication for a patient, as well as considering the message that is being communicated. The study had the following three objectives;

- To explore the views and experiences of mammographers regarding their communicative role before, during and after imaging of patients post mastectomy in the Limpopo province.
- To explore and describe the views of post-mastectomy patients on the role of communication with mammographers before, during and after the imaging procedure
- To develop strategies to enhance the communication between mammographers and post-mastectomy patients

Following personal communication with oncologists from the Limpopo province, the researchers realised that a high number of mastectomies are performed in these hospitals compared to breast-conserving treatment. The personal communication with Dr Mabona, the oncologist, there seems to be a lack of information and community education regarding breast cancer.¹⁶ Patients seem to have little knowledge of breast cancer, the different treatment options available, and how to proceed post mastectomy. The oncologist further said that most patients reported late for consultation resulting in delayed diagnosis and management of breast cancer. In this qualitative study, the researchers explored the role of communication that takes place between mammographers and breast cancer patients before, during, and after the imaging process.

Methodology

This was a qualitative study. According to Gray et al.,¹⁶ exploratory-descriptive designs are often used by researchers who want to address a specific question, with or without the use of a theoretical framework to structure the study. An exploratory qualitative and descriptive design helps to gain an in-depth understanding of what patients and mammographers regard as the communicative role of mammographers. The potential limitation of this approach is that it usually has a small sample size which cannot be accurately interpreted and generalised compared to quantitative studies. It has been established that mammographers regard their communicative role as efficient and productive, yet limited to a certain extent, with patients being satisfied with the communicative role of mammographers during mammography examinations. The researchers found the data collection process less complicated and the reception from the participants was warm. It is descriptive rather than predictive and assists in understanding how individuals grasp a certain phenomenon. Qualitative studies provide information about the human element of an issue and people's emotions, opinions, beliefs and relationships.

In the Limpopo province of South Africa, there are two public hospitals that have a breast clinic or mammography units, namely, the Mankweng Regional Hospital and the Pietersburg Provincial Hospital. Two private hospitals in Polokwane have breast imaging departments,

namely the Medi-Clinic and Netcare Pholoso hospitals. These four hospitals formed the setting for this study. Participants were invited from these facilities upon receiving approval from the relevant authorities. The study population included patients who had been referred for breast imaging or had mastectomy, and mammographers at the four mammography departments. Suitable participants were purposively selected as they were deemed to be the most suitable to meeting the objectives of the study.^{18,19,20} The chosen hospitals operated on different days of the week and, therefore, according to the number of patients booked at each hospital, the study aimed to have at least 50 participants.

Women who had undergone either a uni- or bilateral mastectomy, as well as mammographers (radiographers with a postgraduate certificate in mammography), were invited to volunteer for the study. In-depth interviews were chosen as they allowed us to gather data on the feelings evoked, opinions, experiences, and the meaning people give to the importance of communication. In-depth interviews were conducted and the question guide was developed in accordance with the Gap–Kalamazoo Communication Skills Assessment Form (GKCSAF).¹³ To address the research question in this study, the World Health Organisation standardisation instrument, the International Classification of Functioning, Disability and Health (ICF) core set for breast cancer was also used.

Limpopo province is a diverse province with about 4 tribes originating from the province. Therefore, language barrier might exist and disrupt the communication dynamics between patients and mammographers. These two instruments were used to develop the interview guide and questions were further modified and phrased as open-ended to gather in-depth information. The questions were further modified to make them easily understandable for patients while remaining focussed on the study objectives. To accommodate the study setting and the population of this study, the interview guide for patients was translated into Sepedi. This was done to accommodate patients who could neither read, nor understand English. The interview guide for the mammographers was only developed in English. The translation was conducted according to the guidelines of the European Association of Science Editors (EASE).²¹

Each interview took approximately 15–20 min, and the interviews were audio recorded. Participants gave permission to record the interviews and consent was obtained verbally. The questions were open-ended to gather in-depth information. Data collection took approximately two months (June 2022–July 2022). Saturation was reached after 11 mammographers and 36 patients were interviewed. The researcher saw a pattern of similarities in answers, and therefore data collection was stopped.

Data was analysed using summative content analysis. This approach was deemed appropriate because it helped to explain the perceptions of participants regarding the communicative role of mammographers. The patterns of the terms and phrases used by the participants helped to address the research problem and align the results with the objectives of the study. The recorded interviews were transcribed verbatim by the researcher using the EASE guidelines.²¹

Ethical considerations

The study was conducted after ethical approval was granted by the Research Ethics Committee of the Faculty of Health Sciences (ref no 549/2022). In addition to that, the researcher obtained approval from the Mammography departments in the selected hospitals. The declaration of Helsinki was also taken into consideration, it outlines the ethical principles for medical research involving human subjects. Mammographers and breast cancer patients who had mastectomy gave verbal consent to participate in the study.

Results and discussion

The study had eleven mammographers and 36 patients who were interviewed. Three themes emerged from the study, namely; a) structural service b) Individual perception c) Sociol-cultural background whereby codes were generated in accordance to the most common used words or answers. Mammographers highlighted the importance of being accommodative, supportive, and sympathetic towards patients. Mammographers made every effort to maintain a good communication path and understanding with their patients. The patients had high admiration for the work and support of mammographers and perceived mammographers as healthcare providers who were trustworthy and held them in high regard. The general overview of the results is that, most patients were satisfied with the treatment they received from mammographers. Patients described the communication by mammographers as being consistent and that the mammographers were always welcoming, friendly, kind, and transparent. This can be translated to mean that mammographers seemed to have gained the trust of the breast cancer patients as a result patients are comfortable with talking about their conditions and insecurities that may have existed because of the mastectomy.

Most of the patients indicated that they prefer verbal communication instead of written communication as most of them were illiterate elders with failing eyesight and struggled to read. Patient P9 said *"I cannot read so I will understand better with verbal communication"* Patients did not want to misunderstand what was being written. Unlike with written communication, verbal communication provides the opportunity for asking questions if the patients were confused. Patients explained that hearing the proceedings of the examination verbally was more comfortable than reading, especially if they were not familiar with the language or terms used. Patient P27 indicated that *"Ndzi nga tsakela ku tsaleriwa hi Xitsonga hikuva ndzi twisisa Xitsonga tani hi ririmi ra mina"* which means *"she would appreciate written language provided it is in her home language and not English as she understands Xitsonga better."*

Mammographers in this study explained that they tried to be accommodative and sympathetic during the imaging of patients. When mammographers were asked if the patients were knowledgeable about breast cancer, Mammographer M3 said *"some patients are knowledgeable and some are not and most elderly patients do not know much"*. While Mammographer M8 said *"most of the patients do not understand the stages of breast cancer and treatment plans"* Mammographers believed that post-mastectomy patients, were not knowledgeable about their breast cancer condition, with most patients being concerned with

the recurrence of the breast cancer as their most frequently asked question was: “Will the cancer come back or has it moved to the other breast?” M4 said “ *they are scared and uncomfortable and most of them need assurance*”

Mammographer M8 said “*I prefer verbal communication because I can explain and demonstrate for my patients so that they can understand better*” whereas M2 said “*I normally use the language that they can understand*” Mammographers also observed that for them to gain patients’ trust, one has to speak to them in their language, ask questions that are personal or family-related to help them relax and hopefully open up and be comfortable enough to ask any questions that they may have about breast cancer, as well as giving them the assurance that they are in a safe space. Mammographers M7 said: “*The mammographers observed that most patients know very little about their condition according to the kinds of questions they ask, most of them are concerned about recurrence of the cancer and metastasis, pain duration of the scar.*”

Three themes we generated from the results and further developed codes. Fig. 1 demonstrates the interrelation between themes.

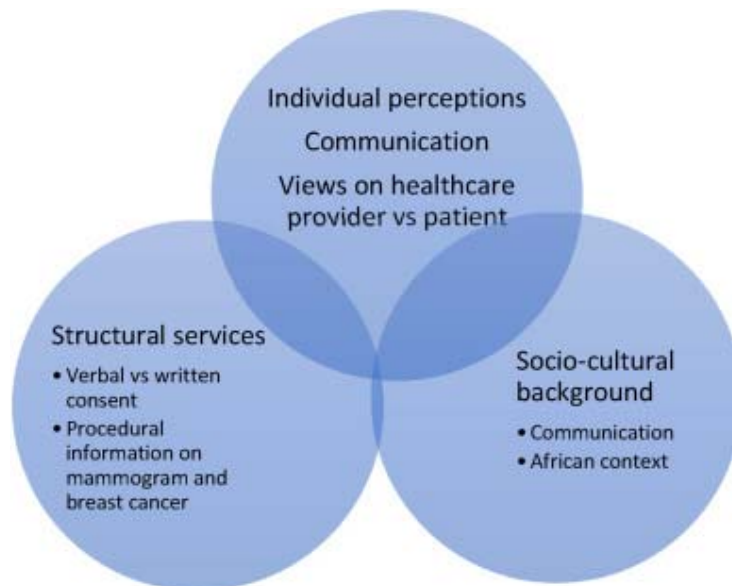


Figure 1. The interrelation between the three themes.

Theme: individual perception

Mammographers viewed patients as scared and anxious and just wanting to get the mammography done without concerning themselves with the information of the condition. Patients do not feel shame about their body image post mastectomy, whereas they view mammographers as supportive, informative, and are appreciative of their efforts and kindness. Mammographers view themselves as unsupportive of patients; hence, the need to treat them with kindness and patience, as well as sympathy, to help the patient and reduce the anxiety they may feel during a mammogram. On the other hand, patients view themselves as knowledgeable about their condition and are comfortable with their body image post mastectomy.

Theme two: structural services

Patients prefer verbal communication rather than written communication as it is easy and convenient. Some patients are illiterate and the elderly patients said they cannot read. Regarding procedural information on the mammography examination and breast cancer, verbal communication make room for any clarity needed or questions to be asked to avoid any confusion. Mammographers and patients mentioned that it is preferable to use the language that a patient is more comfortable with. Most mammographers do demonstrations for better understanding of the examinations.

Theme three: socio-cultural background

Patients are more comfortable with their home language during mammogram examinations and that, in turn, makes them relax and reduces the chances of confusion during the examination as there is an understanding between them when communicating. Moreover, mammographers are trained in English, therefore, it becomes a personal responsibility of the mammographer to eliminate any language barrier that might compromise the service received by the patient. It will, therefore, be more desirable for mammographers to know a few South African languages to be able to accommodate all patients and to ensure that there is good communication between themselves and the patients. A mastectomy has the potential of challenging the concept of femininity to most women; hence, it may seem that post-mastectomy patients are self-conscious about their body image, according to the mammographers, and the urge of mammographers to see the need to always assure patients that they are normal and that a mastectomy should not make them feel less of a woman. Therefore, the different cultures that we have as a rainbow nation, tend to make certain practices uncomfortable for patients, such as undressing in front of a stranger being a challenge and being open about their personal lives tends to be foreign to them.

Limitations of the study

The interview guide for patients was in two languages, namely Sepedi and English. Therefore, for other languages (especially Tshivenda and Xitsonga) the researcher had to use her minimal knowledge of the language to conduct the interviews, which took longer than the rest, but comprehension was established regardless of the difficulties in translation during the interviews.

Conclusion

Communication in healthcare service delivery is key to ensuring cooperation between health care professionals, as well as between professionals and their patients. Similarly, communication in breast cancer imaging is essential for the best outcomes in terms of treating and managing this condition. From the perceptions of patients and mammographers, it is clear that mammographers play an important role in communicating with patients especially in terms of establishing understanding, offering support to patients, and providing the necessary information to patients. Participants from the Limpopo Province explained that they would prefer to receive information in languages they are comfortable with. Participants also preferred verbal rather than written communication. The HPCSA could also extend the

role of mammographers in terms of the information that they can share with patients to allow a more flexible environment without any boundaries. The mode of communication should be taken into consideration whereby patients will receive information in languages they are comfortable in. Therefore, mammography departments must have more written communication in different South African languages to accommodate the diverse population.

Training related to communication for mammographers and possibly the addition of more South African languages as an extra course/module to allow communication with patients to be well carried out. Patients and mammographers have established an understanding within their means and with the above-mentioned suggestions and recommendations, the communicative role of mammographers can be improved. Patients, especially post-mastectomy patients, will have the information they need, high quality service and a safe and comfortable environment in the mammography department.

Authors contribution

MK Chego conception and design of the study, acquisition, analysis and interpretation of the results/data and drafting the manuscript. KM Sethole. D revising it the manuscript critically for important intellect content. Dr RM Kekana and Dr K Malherbe revised the article and gave final approval of the version to be submitted. All authors read and approved the final manuscript.

Conflict of interest statement

None.

Acknowledgements

I would to thank Dr RM Kekana and Dr K Malherbe for supervising and helping the refinement of the study, participating hospitals and mammographers that were part of the interviews. And the University of Pretoria (Department of Radiography) for allowing me to conduct the study. Dr Cherly Tosh helped with the scientific editing of the article. This research did not receive any specific grant from funding agencies in the public, commercial or the none-profit organisations.

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